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Water Resources Data for New York
Water Year 1980. Volume 1. Eastern New York
Excluding Long Island

(U.S.) Geological Survey
Albany, NY

Prepared for

Office of Water Research and Technology
Washington, DC

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March 3, 1849

Water Resources Data for New York

Volume 1. Eastern New York excluding Long Island

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-80-1

WATER YEAR 1980

Prepared in cooperation with the State of
New York and with other agencies

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I

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Doyle G. Frederick, Acting Director

For information on the water program in New York write to
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U.S. Geological Survey
U.S. Post Office and Courthouse
P.O. Box 1350
Albany, New York 12201

1981

PREFACE

This report was prepared by personnel of the New York district of the Water Resources Division of the U.S. Geological Survey under the supervision of L. A. Martens, District Chief, and J. E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of New York and with other agencies.

This report is one of a series issued by State boundary. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and R. J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New York are in three volumes as follows:

Volume 1. Eastern New York excluding Long Island
Volume 2. Long Island
Volume 3. Western New York

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Water resources data for the 1980 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 105 gaging stations; stage only at 10 gaging stations; and stage and contents at 20 gaging stations and 18 other lakes and reservoirs; water quality at 33 gaging stations; and water levels at 25 observation wells. Also included are data for 63 crest-stage and 27 low-flow partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

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WATER RESOURCES DATA FOR NEW YORK, 1980
Volume 1.--Eastern New York excluding Long Island

INTRODUCTION

Water resources data for the 1980 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; quality of precipitation; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 105 gaging stations; stage only at 10 gaging stations; and stage and contents at 20 lakes and reservoirs; water quality at 33 gaging stations, 8 quality of precipitation stations; and water levels at 25 observation wells. Locations of these sites are shown on figures 4A and 4B. Also included are data for 63 crest-stage and 27 low-flow partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released in separate reports.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NY-80-1." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-3107.

SIGNIFICANT HYDROLOGIC EVENTS

The 1980 water year was characterized by hydrologic extremes, ranging from record floods to record low monthly discharges. Most streams had normal seasonal fluctuations except during December through February 1980 (figs. 2 and 3), when trends declined. Annual precipitation and runoff were near or slightly below average in most parts of upstate New York.

Rainfall was slightly above average in October and November and produced above-average runoff through December in most of upstate New York. From December through February, monthly precipitation was significantly below normal, and runoff decreased to record or near-record lows for Feburary. Below-normal temperatures in February caused substantial ice buildups in many streams.

In March, precipitation was above normal and caused a corresponding increase in runoff. Heavy rains on March 21 and 22 produced flooding in eastern and southeastern New York; storm totals of 4 to 5 inches were common in the eastern Catskill Mountains.

During May, precipitation throughout the State ranged generally from one-third to one-half the normal amount. During the remainder of the year, precipitation and runoff fluctuated widely. Summer runoff was generally above normal in the western and northern part of the State and below normal in the eastern and southeastern part.

An intense thunderstorm on November 26, 1979, in Essex County caused flooding and property damage along The Branch, a tributary to the Bouquet River near Elizabethtown. The flood claimed five lives. On March 21 and 22, general flooding in the Catskill Mountain region occurred in Esopus Creek, Neversink River, Schoharie Creek, and Catskill Creek basins. At the Esopus Creek gaging station at Cold Brook, this storm producted the highest discharge since installation of the gage in 1914. At most other long-term stations on streams draining the northern and eastern slopes of the Catskill Mountains, the flows of March 21 and 22 were highest in 25 years. In late June in western New York, thundershowers producted as much as 3.5 inches of rain in half an hour and caused extensive damage in the Albion and Buffalo areas.

By the end of the water year, storage in some water-supply reservoirs in the lower Hudson River and Delaware River basins had become alarmingly low, partly as a result of below-normal rainfall during May, July, August, and September.

Ground-water levels were above average throughout eastern New York and generally normal in western New York during the beginning of the water year (October-November), but, by December, levels had declined to below normal in eastern New York in response to below-average precipitation. Precipitation remained below normal through February, particularly in the eastern and southeastern parts of the State; consequently, water-table altitudes were below average when recharge ceased in the spring as the growing season started.

Summer water-level declines were accentuated in eastern and central New York. Many wells had their lowest September water levels in at least 10 years, and two wells in central New York in September had the lowest recorded levels in 25 years. The general decline in water levels during the 1980 water year continues a downward trend that has prevailed in recent years in all areas except southwestern New York.

Water-quality and discharge data from the 13 NASQAN stations and 1 Benchmark station in upstate New York indicated no significant changes in chemical quality from previous years. Extremes included a high total chromium concentration of 50 µg/L from the Genesee River at Charlotte Docks at Rochester on September 5, 1980, and a low specific conductance of 125 µmho/cm from Sandy Creek at Adams in north-central New York on March 18, 1980. The chromium concentration equals the National Interim Primary Drinking-Water Standard. The Sandy Creek specific conductance was the lowest of record (water years 1965, 1978-80) for samples collected for chemical analyses. Low conductance is generally associated with high discharge, but the relatively large discharge of 1,420 ft^3/s on March 18, 1980, was considerably below extremes recorded previously during sampling at that site.

Monitoring of polychlorinated biphenyl (PCB) concentrations in the Hudson River, begun in 1976, was continued; no measurable change in contamination of the river was observed. A model based on earlier data predicts an inverse relationship between PCB concentration and discharge except at flow extremes. This relationship was confirmed by data collected this year. At peak discharge, high PCB concentrations may result when river turbulence is sufficient to resuspend significant quantities of contaminated bottom material. Flow was high during parts of November 1979 and March and April 1980. However, PCB concentrations were lower during the March high flow than during November and April because most of the water in March was derived from the lower, uncontaminated part of the Hudson, whereas that during November and April was from the upper, more contaminated part of the river. Nevertheless, flows during the spring snowmelt of 1980 were considerably lower than those of 1977 and 1979, and the highest PCB concentrations in 1980 were also comparatively low.

A sustained period of low flows, the first since PCB monitoring began, occurred during the summer and early fall of 1980. Results indicate that the inverse relationship between PCB concentration and discharge does not prevail at very low flows. At discharges below about 2,000 ft^3/s at Waterford (and below comparable flows at the other stations), PCB concentration no longer continues to increase as discharge decrease.

Operation of the precipitation-monitoring network, which was temporarily interrupted in 1979, was resumed this water year. Samples collected during the 1979 water year and stored under refrigeration were analyzed this year. Results confirm trends in chemical composition of precipitation that have been noted since inception of the network in 1964--namely an increase in nitrate, a decrease in sulfate, and little or no change in pH on a Statewide basis.

Data on nutrient transport in Switzer Creek in Steuben County indicate that approximately 85 percent of nitrogen transported during base flow is in the form of nitrate plus nitrite. During storms, however, most of the nitrogen transported is in the form of organic nitrogen, which likely reflects its attachments to suspended sediment. On a annual basis, 90 percent of the phosphorus was transported during storms and only 10 precent during base flow. This distribution results from the strong affinity of phosphate for particulate material, which increases in concentration during storms.

COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative agreements for the systematic collection of water records since 1900. Organizations that assisted in collecting data included in Volume 1, water year 1980, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
County of Dutchess
County of Putnam, Board of Supervisors
County of Rockland, Drainage Agency
County of Ulster, County Legislature
County of Westchester, Department of Public Works
City of Albany, Department of Water and Water Supply
City of New York, Bureau of Water Resources Development
City of New York, Department of Environmental Protection
Town of Clarkstown
Town of Warwick
Village of Nyack
Board of Hudson River-Black River Regulating District
Central New York State Parks Commission
Oswegatchie River-Cranberry Reservoir Commission
Power Authority of the State of New York

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the U.S. Army Corps of Engineers, the Soil Conservation Service, the Environmental Protection Agency, and the St. Lawrence Seaway Development Corp.

The following organizations aided in collecting records:

Mamaroneck, Plattsburgh, Rome, Rye, Tarrytown, and Yonkers; Central Hudson Gas and Electric Corp.; Indian River Co.; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Orange and Rockland Utilities, Inc.; and Power Authority of the State of New York.

Organizations that supplied data are acknowledged in station descriptions.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound system units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material See Bottom material.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Bottom material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material".

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceos organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium, for example water, that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (µg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organic carbon (OC) is a measure of the organic matter present in aqueous solution and (or) suspension. May be reported in any of three categories (DOC, dissolved organic carbon; SOC, suspended organic carbon; TOC, total organic carbon).

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water (chemically dispersed).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. The sample is subjected to mechanical and chemical dispersion in distilled water before analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of algae, fungi, and bacteria which are attached to or live upon submerged objects in lakes and rivers.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PCI, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

Fire algae (Pyrrhophyta) are free-swimming unicells characterized by a red spot.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated napthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated napthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg $C/(m^2.time)$ for periphyton and macrophytes and mg $C/(m^3.time)$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg $O_2/(m^2.time)$ for periphyton and macrophytes and mg $O_2/(m^3.time)$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the work "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	*Hexageria*
Species	*Hexagenia limbata*

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total (as used in tables of chemical analyses):

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station, partial-record station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01300500 includes the 2-digit part number "01" plus the 6-digit downstream order number "300500". In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9- or 10-digit station number) and (or) a latitude-longitude number was used for identification.

NUMBERING SYSTEM FOR WELLS

The 8-digit downstream order station numbers are not assigned to wells. The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 1 below.

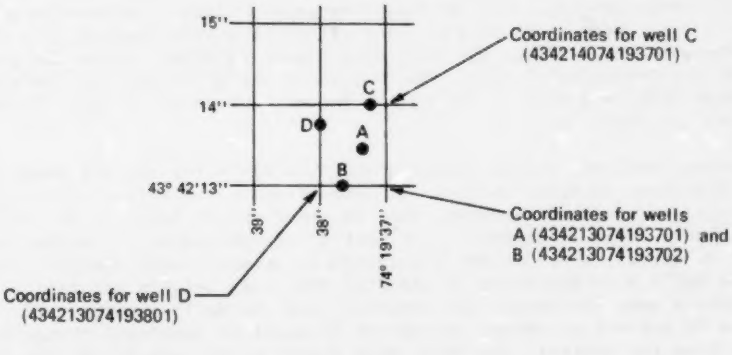


Figure 1. System for numbering wells (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consulation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in the section, "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER-QUALITY RECORDS

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites. Data for precipitation-quality stations appear next. The table of ground-water quality data follow the ground-water level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number.

Descriptive Headings

For continuing record stations, data are preceded by information pertinent to the history of station operation. These descriptive headings give details regarding locations, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Headings for precipitation-quality records include location information and a description of the sample collector.

There is a broad range of water-quality parameters available for most stations whose record exceeds more than a few years operation. Sampling schedules are often intermittant for certain types of data, with analyses available for some but not all years within a stations's period of record. An acurate description of the variety of data available is shown by grouping similar parameters into a few general categories, which are listed in the "PERIOD OF RECORD" paragraph. Each category of data is followed by a notation of the water year(s) for which data is available and a letter code describing the frequency of sampling (see following section, "Frequency-of-Sampling Notation"). Thus, CHEMICAL DATA: 1972-74(c), 1977-80(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the four most recent years.

Categories of Water-Quality Data

The "PERIOD OF RECORD" paragraph lists the following categories of data to describe information available.

CHEMICAL DATA: Usually includes most of the "major ions", and may often include some of the following physical properties: specific conductance, pH, temperature, color, turbidity, dissolved oxygen.

MINOR ELEMENT DATA: Comprises the "heavy metals" and some of the "alkaline earth" groups. Determinations usually include some but not all of the following: Al, As, Ba, Cd, Cr, Co, Cu, Hg, Li, Ni, Pb, Se, Sn, Sr, Zn.

RADIOCHEMICAL DATA: The determinations of the concentration of individual radioactive elements, such as radium 226, cobalt 60, strontium 90, and tritium. This category also includes the gross mesurement of radioactivity (alpha, beta, gamma) without regard to the radiochemical species that produce the radioactivity.

PESTICIDE DATA: The organic compounds (insecticides and herbicides) used to control insects and plants. Routinely, the analyses searches for traces of between 12 to 22 compounds.

BIOLOGICAL DATA: The identification and concentration of microscopic plant organisms (phytoplankton, periphyton), or enteric bacteria (total coliform, fecal coliform, or fecal streptococcal) living in aquatic habitats.

SEDIMENT DATA: Suspended-sediment concentration, suspended-sediment discharge, and particle-size data for discrete samples.

Frequency-of-Sampling Notation

The categories of data given in the "PERIOD OF RECORD" paragraph are followed by the water year(s) for which that kind of data was collected. The amount of data available is specified by the following letter codes:

(a) 1 or 2 samples per year.
(b) 3 to 5 samples per year.
(c) 6 to 9 samples per year.
(d) 10 to 20 samples per year.
(e) more than 20 samples per year.

Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Terminology used in reporting chemical constituents is an indication of whether all or only part of a constituent associated with the solids in a water-quality sample is determined by a chemical analysis. (See preceding section, "Definition of Terms.") The "recoverable" in the terms "Suspended, recoverable", "Total, recoverable", and "Recoverable from bottom material" indicates that the constituent was digested by a method that results in the dissolution of only readily soluble substances. Thus, the determination may not represent all of the constituent actually present in the sample. The "total" in the terms "Total", "Suspended, total", and "Total in bottom material" is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures and/or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

Ground-water level data from observation wells are published herein. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

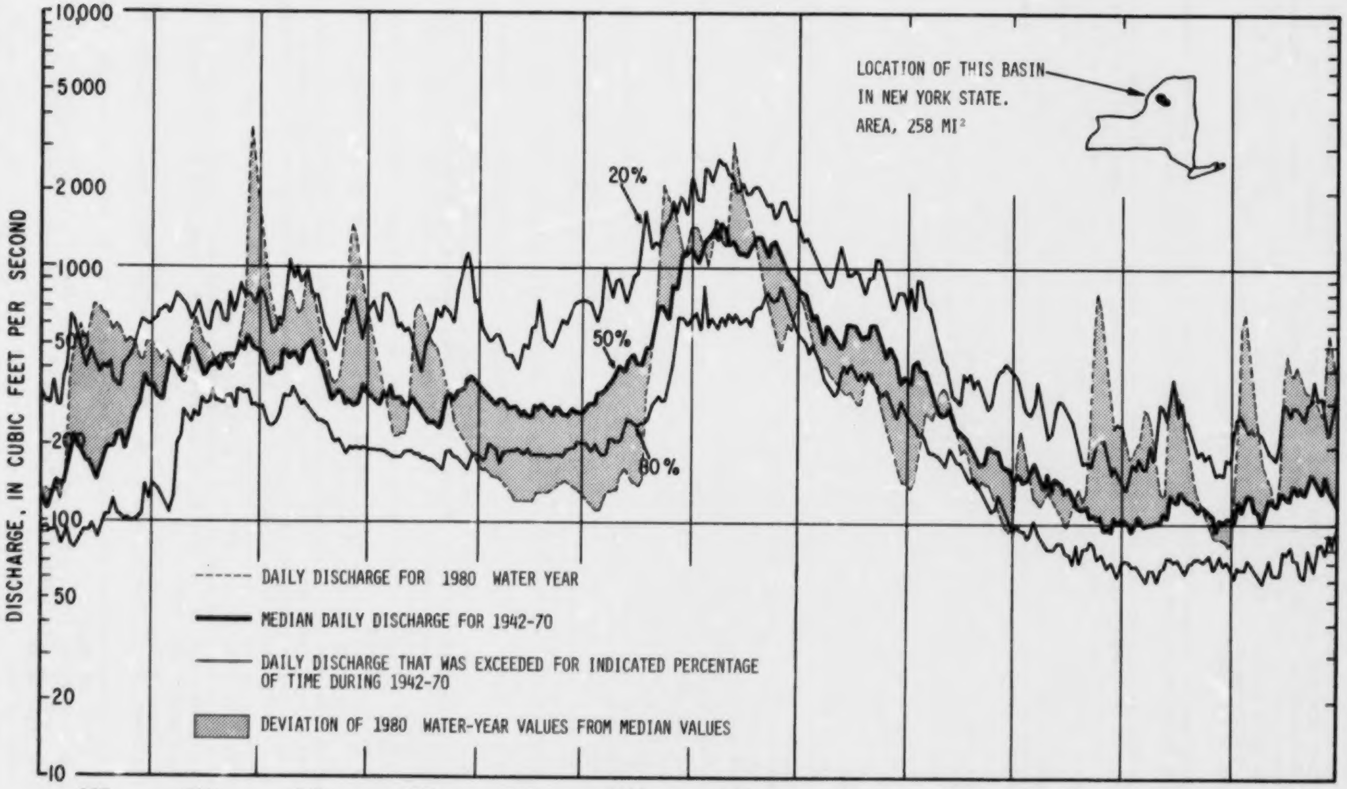


Figure 2.-- Hydrographic comparisons, West Branch Oswegatchie River near Harrisville, N Y

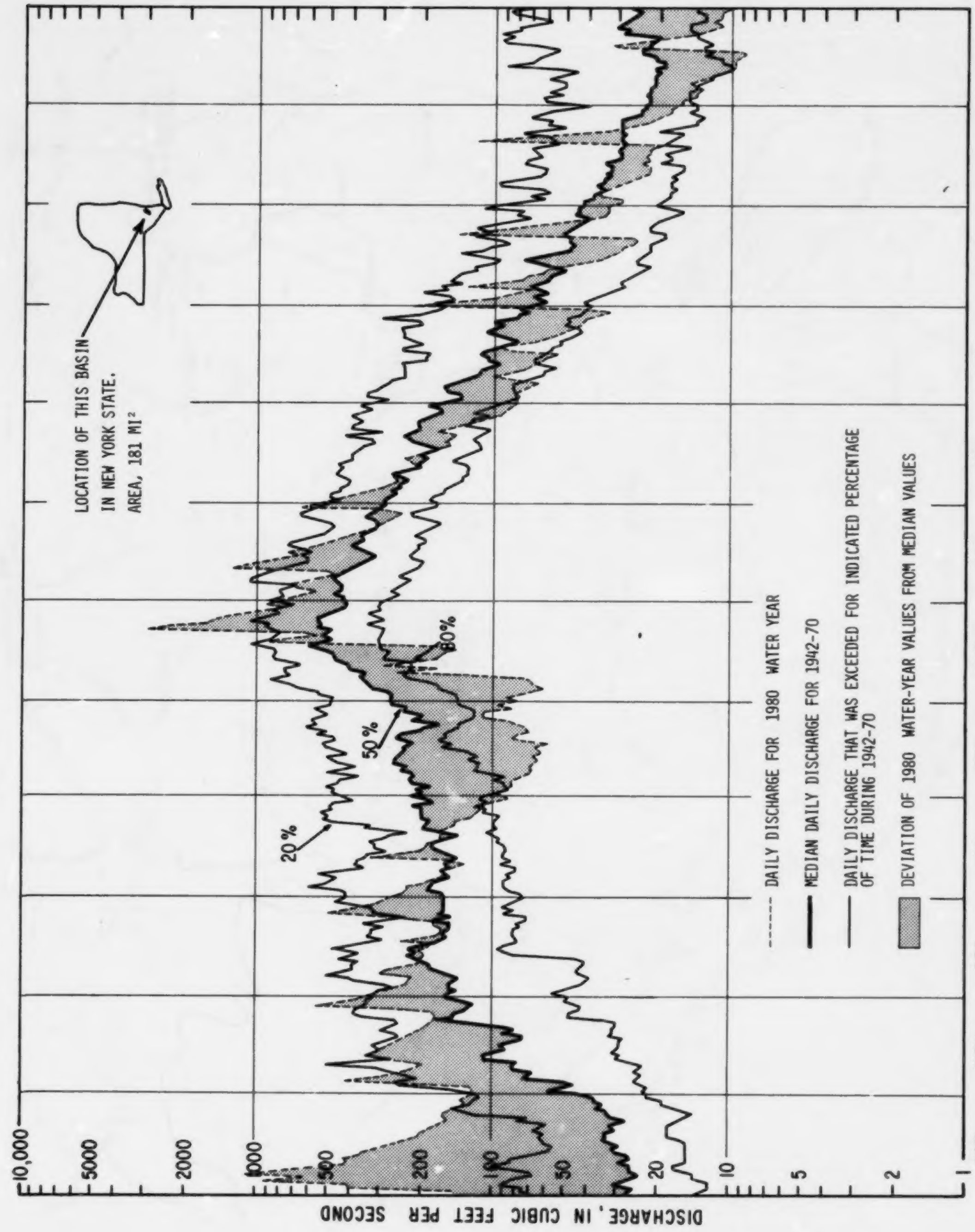
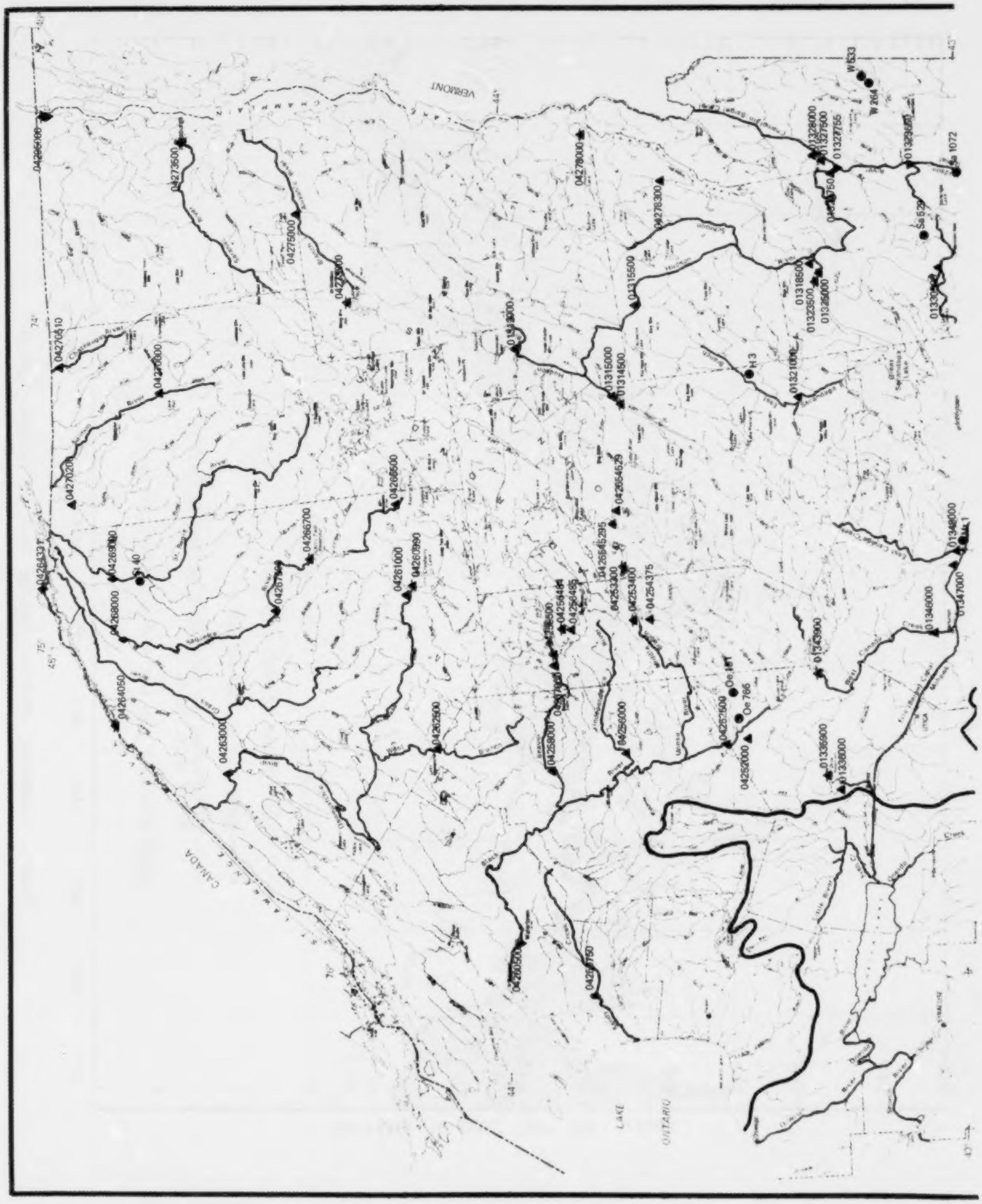


Figure 3.-- Hydrographic comparisons, Wappinger Creek near Wappingers Falls, NY


VERMONT
CANADA
LAKE ONTARIO
04273500
04275000
04276000
04270510
04270000
04270200
04268000
04268800
04264331
04264050
04263000
04262500
04261000
04266500
04266700
04278000
04278300
01315500
01315000
01314500
01318500
01321000
01323500
01325000
01327750
01327500
01328000
01329500
01346000
01347000
01348000
01343900
01336000
01336900
04252000
04252500
04254375
04253400
04253300
04254525
04256000
04258000
04260500
04260750
W 633
W 264
Sa 1072
Sa 529
H 3
Oe 786
Oe 791
Great Sacandaga Lake
Hudson River
Black River
Mohawk River

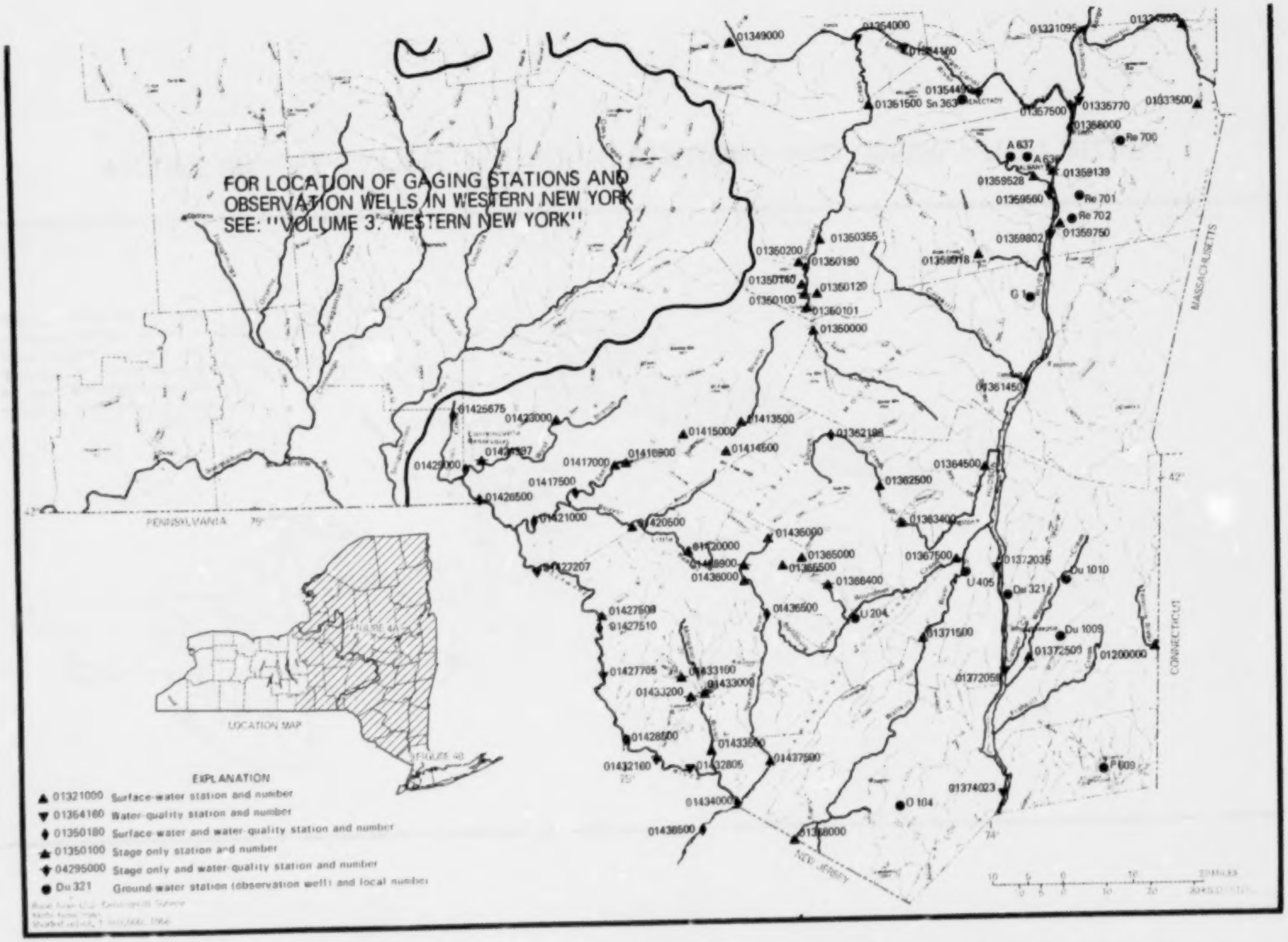

FOR LOCATION OF GAGING STATIONS AND
OBSERVATION WELLS IN WESTERN NEW YORK
SEE: "VOLUME 3: WESTERN NEW YORK"
MASSACHUSETTS
CONNECTICUT
PENNSYLVANIA
NEW JERSEY
LOCATION MAP
FIGURE 4A
FIGURE 4B
42°
75°
74°
01349000
01354000
01354100
01321095
01331500
01335770
01357500
01358000
01354400
Sn 363
01361500
A 637
A 636
Re 700
01359139
01359528
01359560
Re 701
Re 702
01359750
01359802
01359918
G 1
01360355
01360200
01360180
01360140
01360120
01360100
01360101
01360000
01361450
01362198
01364500
01362500
01363400
01367500
U 405
01372035
Du 1010
Du 321
01365000
01365500
01366400
U 204
01371500
Du 1009
01372500
01200000
01372058
F 609
01374023
O 104
01368000
01425675
01423000
01426397
01426000
01426500
01415000
01413500
01414500
01417000
01416900
01417500
01421000
01420500
01420000
01436000
01438000
01427207
01427500
01427510
01427705
01433100
01433200
01433000
01436500
01428500
01432160
01432805
01433500
01437500
01434000
01436500
EXPLANATION
▲ 01321000 Surface-water station and number
▼ 01364160 Water-quality station and number
♦ 01350180 Surface-water and water-quality station and number
▲ 01350100 Stage only station and number
♦ 04295000 Stage only and water-quality station and number
● Du 321 Ground-water station (observation well) and local number
10 5 0 10 20 MILES
10 5 0 10 20 30 KILOMETERS

FIGURE 4A.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

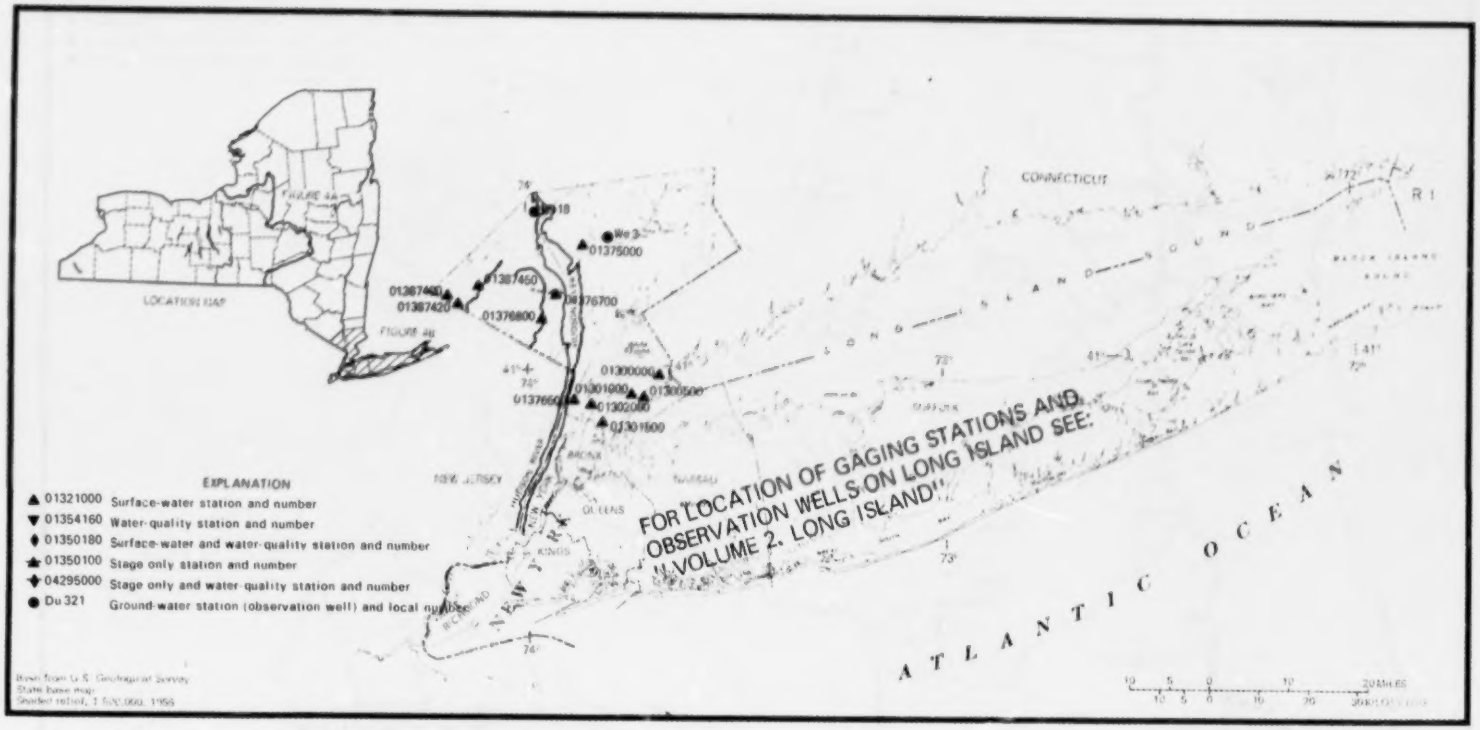

LOCATION MAP
FIGURE 4A
FIGURE 4B
01387450
01387420
01387450
01376800
01376700
01375000
We 3
18
74°
41°
01376500
01301000
01300000
01300500
01302000
01301500
NEW JERSEY
BRONX
QUEENS
KINGS
NASSAU
SUFFOLK
RICHMOND
NEW YORK
HUDSON RIVER
CONNECTICUT
R I
L O N G   I S L A N D   S O U N D
BLOCK ISLAND SOUND
73°
72°
A T L A N T I C   O C E A N
10 5 0 10 20 MILES
10 5 0 10 20 KILOMETERS
FOR LOCATION OF GAGING STATIONS AND OBSERVATION WELLS ON LONG ISLAND SEE: "VOLUME 2. LONG ISLAND"
EXPLANATION
▲ 01321000 Surface-water station and number
▼ 01354160 Water-quality station and number
◆ 01350180 Surface-water and water-quality station and number
▲ 01350100 Stage only station and number
✦ 04295000 Stage only and water-quality station and number
● Du 321 Ground-water station (observation well) and local number
Base from U.S. Geological Survey
State base map
Shaded relief, 1:500,000, 1956

FIGURE 4B.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

01200000 TENMILE RIVER NEAR GAYLORDSVILLE, CT

LOCATION.--Lat 41°39'32", long 73°31'44", Dutchess County, New York, Hydrologic Unit 01100005, on right bank 0.1 mi (0.2 km) downstream from Deuel Hollow Brook, 1.2 mi (1.9 km) upstream from New York-Connecticut State line, 1.7 mi (2.7 km) upstream from mouth, and 2.5 mi (4.0 km) northwest of Gaylordsville.

DRAINAGE AREA.--203 mi² (526 km²).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for period October to December 1929, published in WSP 1301.

REVISED RECORDS.--WSP 1201: 1939. WSP 1701: 1955-56, 1957(M), 1958-59. WSP 1901: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 304.4 ft (92.78 m), National Geodetic Vertical Datum of 1929, (levels by Connecticut Light and Power Company).

REMARKS.--Records good. Infrequent regulation at low flow. Records of iron, specific conductance, and pH of daily samples for 1958-59 available in district office at Hartford, Connecticut. Chemical analyses available for water years 1959 (WSP 1641), 1968 (WSP 2091), 1973-74 (WRDC 1973-74), 1975 (WDR CT-75-1) and water temperatures available for water year 1959 (WSP 1641).

AVERAGE DISCHARGE.--51 years, 305 ft³/s (8.638 m³/s), 20.40 in/yr (518 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft³/s (493 m³/s) Aug. 19, 1955, gage height, 14.9 ft (4.54 m), from high-water mark, from rating curve extended above 9,800 ft³/s (278 m³/s); minimum, 5 ft³/s (0.14 m³/s) Sept. 8, 1957; minimum gage height, 0.52 ft (0.158 m) Sept. 24, 26, 1939; minimum daily discharge, 7 ft³/s (0.20 m³/s) Oct. 7, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 18	1330	1430	40.50	4.48	1.36	Mar. 23	0100	*3880	110	*7.02	2.14
Apr. 10	2230	2680	75.90	5.93	1.81						

Minimum discharge, 11 ft³/s (0.311 m³/s) Sept. 13, 14, gage height, 0.55 ft (0.168 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	134	450	315	125	80	800	550	104	199	36	18
2	330	132	403	297	122	80	703	491	106	139	34	19
3	369	376	363	279	120	79	640	453	104	122	40	18
4	626	542	340	238	118	78	790	417	104	97	45	17
5	403	363	327	241	115	76	914	379	96	86	41	17
6	622	312	315	189	112	78	712	350	86	157	41	18
7	468	282	432	215	110	86	618	327	92	124	51	16
8	363	262	397	202	110	199	571	334	134	96	47	17
9	321	246	330	187	108	383	680	346	130	80	39	16
10	340	282	306	175	105	209	2330	318	109	71	34	15
11	379	373	288	194	104	373	2150	291	101	65	33	13
12	369	390	279	671	102	276	1420	294	96	59	41	13
13	376	369	279	446	100	197	1130	309	91	54	40	11
14	324	353	300	390	98	175	952	312	80	51	36	11
15	285	334	268	363	97	164	1100	303	76	47	38	12
16	260	309	262	324	96	141	1010	268	83	44	37	12
17	235	285	330	285	95	172	835	243	109	42	36	13
18	220	268	254	274	94	1110	727	223	86	40	32	30
19	202	254	228	270	92	780	653	225	76	38	29	44
20	192	243	235	250	91	487	592	220	70	36	38	35
21	182	235	220	230	90	887	546	209	66	35	39	28
22	177	228	215	220	89	3450	503	251	62	47	41	24
23	172	223	225	205	110	2840	457	223	61	63	36	22
24	162	215	251	195	130	1660	428	189	57	60	31	20
25	153	215	506	180	109	1430	403	168	56	49	27	18
26	149	376	675	170	90	1190	393	151	54	41	24	18
27	151	1030	530	160	83	941	383	138	48	37	32	20
28	143	717	464	150	82	805	432	120	46	34	42	18
29	151	592	417	140	81	751	671	115	46	37	20	17
30	145	510	386	135	---	941	653	109	306	44	18	16
31	138	---	353	130	---	892	---	102	---	42	18	---
TOTAL	8573	10450	10628	7720	2978	21010	24196	8428	2735	2136	1096	566
MEAN	277	348	343	249	103	678	807	272	91.2	68.9	35.4	18.9
MAX	626	1030	675	671	130	3450	2330	550	306	199	51	44
MIN	138	132	215	130	81	76	383	102	46	34	18	11
CFSM	1.37	1.71	1.69	1.23	.51	3.34	3.98	1.34	.45	.34	.17	.09
IN.	1.57	1.91	1.95	1.41	.55	3.85	4.43	1.54	.50	.39	.20	.10

CAL YR 1979 TOTAL 155243 MEAN 425 MAX 4560 MIN 30 CFSM 2.09 IN 28.45
WTR YR 1980 TOTAL 100516 MEAN 275 MAX 3450 MIN 11 CFSM 1.36 IN 18.42

01300000 BLIND BROOK AT RYE, NY

LOCATION.--Lat 40°59'00", long 73°41'14", Westchester County, Hydrologic Unit 02030102, on left bank at Rye, just upstream from bridge on Theodore Fremd Avenue, 0.25 mi (0.40 km) southwest of Penn Central Transportation Co. railroad station, and 0.85 mi (1.37 km) upstream from mean high tide in Milton Harbor.

DRAINAGE AREA.--9.20 mi² (23.8 km²).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 13.05 ft (3.978 m) National Geodetic Vertical Datum of 1929 (levels by City of Rye).

REMARKS.--Records good. Medium and high flows affected by detention reservoir 2 mi (3 km) upstream (capacity, about 26 acre-ft (32,1000 m³) at spillway level or 50 acre-ft (61,700 m³) at crest of concrete dam).

AVERAGE DISCHARGE.--36 years, 15.7 ft³/s (0.445 m³/s), 23.17 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,320 ft³/s (65.7 m³/s) June 19, 1972, gage height, 12.44 ft (3.792 m), from floodmark in gage house, from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of indirect measurement of peak flow; minimum, 0.12 ft³/s (0.003 m³/s) July 5, 1953, gage height, 0.80 ft (0.244 m), result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 406 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 22	0730	512	14.5	4.57	1.393	Apr. 10	0145	*1,940	54.9	*10.71	3.264

Minimum discharge, 0.64 ft³/s (0.018 m³/s) Sept. 8, 9, 10, 11, 12, 13, 15, 16; minimum gage height, 0.91 ft (0.277 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	4.6	9.6	11	6.2	5.4	75	22	5.9	5.8	3.8	.82
2	31	4.7	8.8	10	5.4	5.0	35	18	16	6.0	7.2	2.2
3	46	35	14	9.8	5.4	4.8	27	16	26	9.0	19	2.2
4	21	14	13	8.9	5.1	4.6	89	14	11	5.0	5.6	1.5
5	12	8.2	8.5	8.9	5.1	5.5	45	12	6.6	4.9	3.7	1.1
6	18	7.0	10	8.2	5.0	5.6	27	11	5.4	15	3.3	.95
7	8.9	6.6	25	7.9	5.2	5.1	22	11	12	4.6	3.0	.82
8	7.0	6.3	12	8.2	5.1	8.1	20	36	18	3.4	2.6	.73
9	8.7	5.9	9.6	7.6	5.1	11	181	18	15	3.2	2.3	.68
10	28	10	8.8	7.0	5.2	10	555	13	19	2.9	2.0	.68
11	23	14	8.4	16	5.0	66	54	12	8.8	2.6	1.9	.67
12	13	48	8.1	60	5.0	15	38	13	6.6	2.4	2.0	.68
13	12	15	19	15	4.9	11	28	26	5.7	2.1	2.0	.75
14	8.9	14	19	13	4.9	24	38	17	5.4	1.9	1.8	.82
15	7.5	12	12	13	5.0	21	61	12	4.7	1.9	1.8	.80
16	7.0	9.9	11	11	9.7	20	29	10	4.3	1.9	1.7	.71
17	6.3	8.7	13	10	8.3	25	22	9.4	3.8	1.9	1.4	1.2
18	6.2	7.9	9.2	11	5.9	58	20	9.9	3.4	1.8	1.2	19
19	5.9	7.3	8.2	27	5.9	23	18	11	3.3	1.7	1.2	3.4
20	5.7	7.4	8.1	15	7.0	18	17	14	3.3	1.7	1.2	1.8
21	5.6	6.8	8.2	12	7.7	183	17	27	3.2	1.7	1.3	1.4
22	5.5	6.7	8.8	11	9.2	369	14	20	3.0	2.7	1.2	1.2
23	5.0	6.7	9.9	13	15	60	13	11	2.7	5.3	1.1	1.0
24	4.9	6.9	12	10	13	38	12	9.3	2.6	3.2	1.0	.94
25	4.7	7.8	110	8.7	9.2	82	12	8.2	2.6	2.0	.95	.89
26	4.4	58	30	8.5	7.8	37	12	6.9	2.4	1.5	.90	1.3
27	4.3	41	19	7.9	6.6	27	13	6.2	2.9	1.3	.85	.96
28	6.6	16	16	7.9	6.5	23	85	5.8	2.7	1.2	.83	.85
29	9.1	13	14	7.4	5.8	37	68	5.5	3.5	99	.77	.80
30	5.6	11	13	6.7	---	58	28	5.2	34	17	.78	.78
31	4.8	---	12	6.5	---	70	---	5.2	---	5.5	.82	---
TOTAL	378.6	420.4	488.2	378.1	195.2	1330.1	1675	415.6	243.8	220.1	79.20	51.63
MEAN	12.2	14.0	15.7	12.2	6.73	42.9	55.8	13.4	8.13	7.10	2.55	1.72
MAX	46	58	110	60	15	369	555	36	34	99	19	19
MIN	4.3	4.6	8.1	6.5	4.9	4.6	12	5.2	2.4	1.2	.77	.67
CFSM	1.33	1.52	1.71	1.33	.73	4.66	6.07	1.46	.88	.77	.28	.19
IN.	1.53	1.70	1.97	1.53	.79	5.38	6.77	1.68	.99	.89	.32	.21

CAL YR 1979 TOTAL 8016.38 MEAN 22.0 MAX 853 MIN .99 CFSM 2.39 IN 32.41
WTR YR 1980 TOTAL 5875.93 MEAN 16.1 MAX 555 MIN .67 CFSM 1.75 IN 23.76

01300500 BEAVER SWAMP BROOK AT MAMARONECK, NY

LOCATION.--Lat 40°57'21", long 73°43'07", Westchester County, Hydrologic Unit 02030102, on right bank just downstream from bridge on Short Street, in Mamaroneck, 0.2 mi (0.3 km) downstream from Brentwood Brook, and 0.2 mi (0.3 km) upstream from tidal barrier in Guion Creek, Mamaroneck Harbor.

DRAINAGE AREA.--4.71 mi² (12.2 km²).

PERIOD OF RECORD.--November 1943 to current year. Prior to October 1967, published as "near Harrison."

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.99 ft (7.617 m) National Geodetic Vertical Datum of 1929. Prior to June 8, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period which are poor. Flow affected by natural storage in swampy areas above station.

AVERAGE DISCHARGE.--36 years, 6.53 ft³/s (0.185 m³/s), 18.82 in/yr (478 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 288 ft³/s (8.16 m³/s) Jan. 21, 1979, gage height, 4.28 ft (1.305 m); no flow at times during 1944, 1953, 1959, 1964, 1965, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 86 ft³/s (2.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 22	1045	117	3.31	2.15	0.655	July 29	1145	87	2.46	1.84	0.561
Apr. 10	2245	*162	4.59	*2.72	.829						

Minimum daily discharge, 0.16 ft³/s (0.005 m³/s) July 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	2.5	3.9	4.8	2.3	1.8	39	9.9	1.7	2.7	2.4	.65
2	24	2.5	3.7	4.6	2.2	1.7	22	7.9	3.8	2.3	4.9	1.9
3	13	15	3.1	4.1	2.1	1.7	17	6.7	6.0	1.9	6.5	2.0
4	9.5	10	3.0	3.7	2.0	1.7	36	5.6	3.6	1.1	3.0	.40
5	7.0	5.9	3.0	3.7	1.9	2.0	31	5.1	2.1	2.3	2.1	.31
6	7.5	4.5	4.0	3.4	1.8	2.0	18	4.7	1.5	6.1	1.7	.29
7	4.7	4.4	7.9	3.3	1.8	1.8	14	4.9	4.5	1.4	1.3	.25
8	3.5	4.4	5.4	3.2	1.8	3.9	13	11	4.3	.78	1.2	.26
9	4.2	3.6	3.8	3.1	1.7	5.0	40	6.9	4.3	.58	.94	.25
10	10	5.4	3.3	2.8	1.7	4.7	145	4.8	4.8	.50	.82	.29
11	10	7.6	3.1	7.8	1.7	21	60	4.3	2.7	.50	1.0	.30
12	7.1	21	2.9	19	1.6	7.8	21	4.8	1.9	.36	.89	.27
13	6.5	9.7	6.5	7.9	1.6	4.5	14	7.4	1.2	.31	.67	.24
14	4.8	5.6	5.9	6.5	1.6	9.9	16	5.1	1.2	.31	.58	.26
15	4.0	4.5	4.8	5.5	1.6	10	22	3.9	1.1	.38	.67	.30
16	3.5	3.5	4.2	4.4	5.0	8.3	13	3.3	1.0	.26	.58	.28
17	3.3	3.2	4.8	4.0	3.8	9.0	10	3.1	.89	.29	.43	.30
18	3.1	2.9	3.2	4.6	2.7	18	8.8	3.2	.78	.27	.43	7.2
19	2.8	2.7	2.8	9.6	2.1	12	7.9	3.6	.78	.30	.43	.97
20	2.7	2.6	2.7	6.1	2.2	8.7	7.0	3.7	.89	.28	.43	.69
21	2.6	2.5	2.7	4.9	2.4	40	6.6	6.7	.89	.22	.36	.52
22	2.6	2.4	2.8	4.7	3.7	102	5.8	5.0	.67	.69	.39	.45
23	2.4	2.5	3.3	5.0	5.8	48	5.6	3.3	.50	1.2	.48	.44
24	2.0	2.2	4.6	4.1	5.2	21	4.9	2.7	.31	.34	.41	.38
25	1.9	2.0	33	3.6	3.6	30	4.7	2.3	.36	.23	.39	.31
26	2.1	11	19	3.4	2.8	18	4.9	2.0	.36	.19	.41	.56
27	3.7	13	10	3.2	2.4	13	5.4	1.8	.36	.17	.52	.25
28	4.4	6.9	7.7	3.0	2.2	11	26	1.7	.36	.16	.48	.19
29	3.7	4.8	6.7	2.9	2.0	16	30	1.6	.36	38	.49	.21
30	2.8	4.1	5.9	2.7	---	27	13	1.4	11	19	.60	.20
31	2.5	---	5.2	2.5	---	32	---	1.7	---	4.5	.70	---
TOTAL	177.9	172.9	182.9	152.1	73.3	493.5	661.6	140.1	64.21	87.62	36.20	20.92
MEAN	5.74	5.76	5.90	4.91	2.53	15.9	22.1	4.52	2.14	2.83	1.17	.70
MAX	24	21	33	19	5.8	102	145	11	11	38	6.5	7.2
MIN	1.9	2.0	2.7	2.5	1.6	1.7	4.7	1.4	.31	.16	.36	.19
CFSM	1.22	1.22	1.25	1.04	.54	3.38	4.69	.96	.45	.60	.25	.15
IN.	1.40	1.37	1.44	1.20	.58	3.90	5.22	1.11	.51	.69	.29	.17

CAL YR 1979 TOTAL 3366.07 MEAN 9.22 MAX 205 MIN .50 CFSM 1.96 IN 26.58
WTR YR 1980 TOTAL 2263.25 MEAN 6.18 MAX 145 MIN .16 CFSM 1.31 IN 17.87

01301000 MAMARONECK RIVER AT MAMARONECK, NY

LOCATION.--Lat 40°57'14", long 73°44'06", Westchester County, Hydrologic Unit 02030102, on left bank in Mamaroneck, 113 ft (34 m) downstream from bridge on Halstead Avenue, 700 ft (213 m) downstream from Sheldrake River, and 0.3 mi (0.5 km) upstream from mean high tide in Mamaroneck Harbor.

DRAINAGE AREA.--23.4 mi^2 (60.6 km^2).

PERIOD OF RECORD.--November 1943 to July 1953, September 1954 to current year.

REVISED RECORDS.--WSP 1502: 1944(M), 1951(M). WDR NY-76-1; 1972(M), 1973(M), 1974(M), 1975(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 11.46 ft (3.493 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1954, water-stage recorder at same site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records good. Storage in former water-supply reservoir on Mamaroneck River, affect unknown.

AVERAGE DISCHARGE.--34 years (1944-52, 1954-80), 34.9 ft^3/s (0.988 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft^3/s (105 m^3/s) Sept. 26, 1975, gage height, 10.15 ft (3.094 m), from rating curve extended above 2,000 ft^3/s (56.6 m^3/s) on basis of indirect measurement of peak flow at 10.15 ft (3.094 m); minimum, 0.06 ft^3/s (0.002 m^3/s) Sept. 30, 1965; minimum daily, 0.10 ft^3/s (0.003 m^3/s) Sept. 29, 30, 1965; minimum gage height since Sept. 9, 1954, 0.10 ft (0.030 m) July 21, 22, Aug. 18, 19, 1957, Aug. 14, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Backwater from hurricane wave reached a stage of about 11.5 ft (3.51 m) present datum, Sept. 21, 1938, from information by officials of village of Mamaroneck.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,790 ft^3/s (79.0 m^3/s) Apr. 10, gage height, 7.90 ft (2.408 m); minimum, 2.2 ft^3/s (0.062 m^3/s) Sept. 12, 13, 14, 16, 17, gage height, 0.25 ft (0.076 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	8.8	27	29	16	13	194	71	13	13	21	3.6
2	64	8.9	25	28	15	12	108	55	34	16	28	7.7
3	59	80	23	26	14	12	86	48	44	23	51	13
4	40	30	21	25	14	12	213	43	24	16	23	5.2
5	28	19	20	28	14	15	129	40	14	19	21	4.4
6	50	20	23	26	14	14	82	38	15	39	11	4.6
7	22	19	54	25	14	13	69	36	32	14	9.1	3.5
8	18	18	27	25	14	21	65	88	37	7.6	7.9	3.5
9	21	15	22	24	14	28	366	44	31	6.1	7.2	3.3
10	65	25	22	23	14	22	1230	36	45	5.5	6.4	3.2
11	45	29	22	46	13	146	200	33	29	5.2	6.2	2.6
12	30	91	21	113	14	47	134	38	14	4.8	6.8	2.4
13	29	37	44	41	14	37	106	65	12	4.3	6.3	2.4
14	22	38	38	36	13	77	124	44	11	4.0	5.8	2.7
15	20	31	27	35	13	69	155	34	10	4.0	6.1	2.8
16	18	20	25	32	27	62	94	30	9.8	4.4	6.1	2.6
17	16	18	32	29	24	70	72	28	9.1	5.0	5.2	3.6
18	14	17	23	30	19	126	57	28	8.7	4.3	4.8	61
19	13	16	21	59	15	67	51	31	8.4	4.0	6.0	8.2
20	12	15	20	34	17	55	47	29	8.1	5.2	7.3	5.0
21	12	15	20	29	18	403	45	54	7.4	4.0	6.8	4.4
22	12	14	21	28	21	816	39	40	7.2	4.7	5.5	4.1
23	11	15	22	31	33	216	36	24	6.7	10	5.0	5.4
24	11	14	29	25	27	132	34	20	6.5	5.8	4.4	5.6
25	10	14	201	22	22	208	35	18	6.0	4.0	4.1	5.7
26	9.9	115	70	21	19	118	37	15	5.2	3.6	4.0	7.0
27	11	82	48	20	17	94	38	14	5.4	3.3	3.9	6.4
28	15	45	40	20	16	76	214	13	5.1	3.1	3.7	5.1
29	18	45	36	19	15	103	176	12	6.4	389	3.7	5.0
30	12	37	34	19	---	133	94	12	77	64	3.6	3.3
31	9.6	---	32	17	---	176	---	12	---	36	3.5	---
TOTAL	813.5	951.7	1090	965	500	3393	4330	1093	542.0	731.9	294.4	197.3
MEAN	26.2	31.7	35.2	31.1	17.2	109	144	35.3	18.1	23.6	9.50	6.58
MAX	96	115	201	113	33	816	1230	88	77	389	51	61
MIN	9.6	8.8	20	17	13	12	34	12	5.1	3.1	3.5	2.4

CAL YR 1979 TOTAL 19829.0 MEAN 54.3 MAX 1700 MIN 3.4
WTR YR 1980 TOTAL 14901.8 MEAN 40.7 MAX 1230 MIN 2.4

01301500 HUTCHINSON RIVER AT PELHAM, NY

LOCATION.--Lat 40°54'41", long 73°48'55", Westchester County, Hydrologic Unit 02030102, on right bank in Pelham, just upstream from Penn Central Transportation Co. bridge, 100 ft (30 m) downstream from Pelham Lake, and 1.5 mi (2.4 km) west of New Rochelle.

DRAINAGE AREA.--5.76 mi^2 (14.9 km^2).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.92 ft (3.938 m) National Geodetic Vertical Datum of 1929 (levels by county of Westchester).

REMARKS.--Records poor. Flow controlled by Pelham Lake and three reservoirs above station.

AVERAGE DISCHARGE.--36 years (1944-80), 7.07 ft^3/s (0.200 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 ft^3/s (14.9 m^3/s) Aug. 28, 1971, gage height, 5.18 ft (1.579 m), from rating curve extended above 200 ft^3/s (5.66 m^3/s), maximum gage height, 5.38 ft (1.640 m) Jan. 21, 1979; minimum, 0.01 ft^3/s (<0.001 m^3/s) July 27, 1957; minimum daily, 0.02 ft^3/s (0.001 m^3/s) Aug. 2-6, 1955, July 26, 27, 1957, Oct. 26-30, 1964; minimum gage height, 1.86 ft (0.567 m) Aug. 2, 5, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 381 ft^3/s (10.8 m^3/s) Apr. 10, gage height, 5.03 ft (1.533 m); minimum, 0.16 ft^3/s (0.005 m^3/s) Sept. 10, gage height, 2.18 ft (0.664 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	3.9	2.9	2.8	2.0	2.3	35	11	3.0	6.0	1.6	3.0
2	15	4.4	2.5	2.9	1.9	2.2	18	8.0	8.0	4.9	3.0	5.5
3	21	20	2.2	2.7	1.8	2.0	13	6.4	12	4.6	7.0	5.0
4	13	12	1.9	2.4	1.9	1.9	36	5.2	5.6	3.8	4.0	1.1
5	10	6.0	1.7	2.3	1.9	2.6	23	4.7	4.3	3.9	2.9	1.3
6	10	3.8	3.3	2.3	1.8	2.7	15	4.5	3.4	5.2	2.3	1.2
7	6.3	2.9	8.4	2.2	1.9	2.9	12	5.4	6.4	3.4	1.9	1.1
8	4.3	2.2	5.0	2.3	1.9	5.1	10	15	9.0	3.0	1.6	.73
9	5.4	2.2	3.6	2.1	2.0	7.9	20	6.4	5.8	2.1	1.4	.50
10	11	4.6	2.0	1.8	2.0	7.1	200	4.1	7.0	2.1	1.2	.40
11	10	6.2	1.5	8.1	2.0	29	30	8.0	6.0	1.8	1.1	.93
12	8.1	21	1.8	22	1.9	11	19	10	4.3	1.6	1.0	.77
13	6.0	10	6.6	8.0	1.9	5.4	16	9.0	3.6	1.3	.90	.75
14	4.5	6.3	7.3	4.9	1.9	11	22	5.6	3.3	1.1	.80	1.1
15	3.6	4.0	4.5	4.2	1.9	11	31	4.2	2.9	.99	.76	.62
16	3.0	2.5	3.6	3.7	6.2	7.5	22	3.9	2.4	.93	.72	.40
17	2.8	2.4	6.0	3.3	5.3	7.9	14	3.7	1.9	1.1	.68	.73
18	2.6	2.3	4.1	4.0	3.6	18	11	3.9	1.7	.69	.66	11
19	2.6	2.2	2.2	9.1	3.1	11	9.0	4.0	1.6	.59	.64	1.9
20	2.4	2.1	2.1	6.2	3.0	7.3	8.0	4.0	1.5	.67	.62	1.6
21	2.4	2.0	2.1	4.6	3.1	55	8.0	11	1.5	7.6	.62	1.5
22	2.6	2.0	2.7	3.9	4.8	115	6.0	4.5	1.4	10	.71	1.2
23	2.9	2.0	3.8	3.8	7.7	35	5.9	4.0	1.3	20	.59	1.0
24	3.2	2.0	6.0	3.4	6.0	16	5.6	3.7	1.2	8.0	.59	.94
25	2.9	2.1	30	3.0	4.5	29	5.4	3.4	1.1	5.0	.53	.83
26	3.2	20	14	2.3	3.9	16	5.2	3.2	1.0	3.9	.76	1.2
27	3.6	21	6.4	2.2	3.4	11	7.0	3.0	1.2	3.2	.64	.77
28	5.6	8.2	4.6	2.6	2.9	9.4	50	2.8	1.1	2.9	.68	.51
29	3.8	4.9	3.6	2.6	2.3	18	30	2.5	1.5	50	.52	.41
30	3.5	3.5	3.0	2.4	---	22	17	2.3	10	8.0	.70	.45
31	3.8	---	3.0	2.2	---	31	---	2.5	---	2.5	1.3	---
TOTAL	191.1	188.7	152.4	130.3	88.5	513.2	704.1	169.9	115.0	170.87	42.42	48.44
MEAN	6.16	6.29	4.92	4.20	3.05	16.6	23.5	5.48	3.83	5.51	1.37	1.61
MAX	21	21	30	22	7.7	115	200	15	12	50	7.0	11
MIN	2.4	2.0	1.5	1.8	1.8	1.9	5.2	2.3	1.0	.59	.52	.40

CAL YR 1979 TOTAL 3459.85 MEAN 9.48 MAX 298 MIN .16
WTR YR 1980 TOTAL 2514.93 MEAN 6.87 MAX 200 MIN .40

NOTE.--No gage-height record Apr. 5 to 22 and Apr. 24 to June 5.

01302000 BRONX RIVER AT BRONXVILLE, NY

LOCATION.--Lat 40°56'09", long 73°50'10", Westchester County, Hydrologic Unit 02030102, on right bank in Bronxville, just upstream from Penn Central Transportation Co. bridge, and 800 ft (244 m) downstream from Grassy Sprain Brook.

DRAINAGE AREA.--26.5 mi^2 (68.6 km^2), not including 18.1 mi^2 (46.9 km^2), from which the entire flow is diverted for municipal water supply and drainage purposes.

PERIOD OF RECORD.--November 1943 to current year.

REVISED RECORDS.--WSP 1382: Drainage area. WRD NY 1971: 1961-67(P), 1968(M), 1970(M). WRD NY 1972: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 73.74 ft (22.476 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diversions from 18.1 mi^2 (46.9 km^2) for municipal water supply and flood control use. Included in these diversions is drainage from 12.8 mi^2 (33.2 km^2) from Kensico Reservoir for City of New York, 4.58 mi^2 (11.9 km^2) from Grassy Sprain Reservoir for Yonkers, 0.67 mi^2 (1.74 km^2) for White Plains, and 0.1 mi^2 (0.3 km^2) for flood control from outflow from Grassy Sprain Reservoir.

AVERAGE DISCHARGE.--36 years (1944-80), 41.7 ft^3/s (1.181 m^3/s), 21.35 in/yr (542 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft^3/s (70.8 m^3/s) June 19, 1972, gage height, 9.63 ft (2.935 m), from rating curve extended above 1,200 ft^3/s (34.0 m^3/s) on basis of flow through culvert computation of peak flow; minimum, 1.0 ft^3/s (0.028 m^3/s) Sept. 10, 1944, gage height, 0.14 ft (0.043 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (16.99 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	2215	933	26.4	5.11	1.558	July 29	1315	1,060	30.0	5.58	1.701
Apr. 10	0700	*1,990	56.4	*8.58	2.615						

Minimum discharge, 4.4 ft^3/s (0.12 m^3/s) Sept. 27, gage height, 0.35 ft (0.107 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	16	31	31	19	15	184	63	29	26	17	7.9
2	69	16	30	30	18	15	102	56	54	27	49	10
3	100	133	29	32	18	14	87	53	79	34	66	24
4	45	40	28	28	19	15	205	48	34	21	21	7.5
5	48	25	28	26	18	21	123	46	22	20	16	6.9
6	67	22	33	25	18	18	84	44	22	79	15	7.7
7	29	21	65	25	18	16	75	76	49	22	13	6.9
8	23	20	32	24	18	30	71	98	58	18	12	6.3
9	32	19	27	22	18	31	208	48	49	15	11	6.7
10	75	45	27	22	18	31	1310	42	44	13	10	6.7
11	47	43	26	63	17	191	328	43	25	12	11	6.4
12	33	98	25	108	17	35	212	75	22	12	12	6.4
13	33	36	56	36	16	26	160	71	21	11	10	6.7
14	25	36	41	31	16	53	145	45	20	11	9.9	7.2
15	23	29	27	29	16	45	218	38	20	11	11	7.1
16	25	25	26	28	38	36	123	37	18	10	9.9	6.7
17	24	24	35	25	26	38	96	35	18	10	9.4	6.7
18	24	22	25	29	20	98	84	39	18	9.6	9.0	134
19	22	22	27	59	20	50	78	40	17	9.6	9.3	16
20	22	22	24	31	21	40	72	40	16	11	9.2	9.2
21	22	22	23	28	21	328	72	76	16	9.5	8.8	7.6
22	21	21	23	28	26	672	63	40	15	11	8.6	7.0
23	18	21	24	28	34	242	58	34	15	21	8.3	6.7
24	18	21	34	25	29	141	54	31	15	11	7.7	6.1
25	16	22	201	23	22	214	53	30	14	8.7	7.6	5.4
26	16	199	55	22	20	114	50	29	14	8.4	7.3	7.7
27	16	90	40	22	18	92	60	27	13	8.2	7.2	6.0
28	29	44	36	22	18	78	284	26	12	8.1	7.0	5.1
29	26	38	35	22	15	110	121	23	19	343	6.7	5.3
30	18	34	34	20	---	143	71	22	183	41	6.7	5.4
31	16	---	32	20	---	186	---	25	---	20	7.1	---
TOTAL	1133	1226	1179	964	592	3138	4851	1400	951	872.1	413.7	359.3
MEAN	36.5	40.9	38.0	31.1	20.4	101	162	45.2	31.7	28.1	13.3	12.0
MAX	151	199	201	108	38	672	1310	98	183	343	66	134
MIN	16	16	23	20	15	14	50	22	12	8.1	6.7	5.1
CFSM	1.38	1.54	1.43	1.17	.77	3.81	6.11	1.71	1.20	1.06	.50	.45
IN.	1.59	1.72	1.65	1.35	.83	4.40	6.81	1.97	1.33	1.22	.58	.50

CAL YR 1979 TOTAL 21063.6 MEAN 57.7 MAX 1250 MIN 9.6 CFSM 2.18 IN 29.57
WTR YR 1980 TOTAL 17079.1 MEAN 46.7 MAX 1310 MIN 5.1 CFSM 1.76 IN 23.97

01312000 HUDSON RIVER NEAR NEWCOMB, NY

LOCATION.--Lat 43°58'00", long 74°07'55", Essex County, Hydrologic Unit 02020001, on right bank 30 ft (9 m) downstream from bridge on State Highway 28N, 0.5 mi (0.8 km) downstream from outlet of Harris Lake, 2 mi (3 km) east of Newcomb, and 4 mi (6 km) upstream from Wolf Creek.

DRAINAGE AREA.--192 mi^2 (497 km^2).

PERIOD OF RECORD.--September 1925 to current year.

REVISED RECORDS.--WSP 696: 1928(M). WSP 711: 1930(m).

GAGE.--Water-stage recorder. Datum of gage is 1,550.38 ft (472.556 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1931, nonrecording gage at site 125 ft (38 m) downstream at same datum. Aug. 6, 1931 to Nov. 4, 1960, water-stage recorder on left bank at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Flow slightly regulated by small reservoirs above station.

AVERAGE DISCHARGE.--55 years, 396 ft^3/s (11.21 m^3/s), 28.01 in/yr (711 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,440 ft^3/s (211 m^3/s) Jan. 1, 1949, gage height, 11.40 ft (3.475 m); minimum, 11 ft^3/s (0.31 m^3/s) Sept. 3, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s (71 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	2400	*3,370	95.4	*7.14	2.176
Apr. 11	0700	3,140	88.9	6.84	2.085

Minimum daily discharge, 52 ft^3/s (1.47 m^3/s) Mar. 12-14; minimum gage height 0.93 ft (0.283 m) Mar. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	251	1010	245	95	56	895	755	178	228	429	302
2	75	245	766	222	93	54	895	701	248	309	394	284
3	68	336	602	194	89	54	827	696	383	257	365	287
4	62	493	505	167	87	56	782	628	686	213	347	284
5	61	501	437	146	85	61	941	522	868	182	333	232
6	379	440	383	132	83	60	935	425	755	196	593	194
7	1010	387	354	126	77	56	816	398	572	235	935	167
8	1010	354	336	122	74	57	856	394	472	235	816	148
9	862	319	293	116	70	60	1070	368	406	421	637	131
10	670	379	287	113	66	59	2380	343	365	476	497	123
11	551	646	274	115	63	54	3020	315	326	372	394	119
12	468	675	268	169	62	52	2270	306	290	299	336	110
13	452	572	296	248	61	52	1790	306	251	260	309	103
14	493	484	306	268	60	52	1630	315	220	222	296	113
15	497	410	293	251	60	54	1390	296	201	194	299	198
16	493	361	268	222	61	56	1540	265	205	175	336	293
17	489	315	254	201	62	60	1200	240	215	160	302	254
18	452	290	215	184	61	80	868	237	201	148	262	296
19	464	271	191	173	61	92	655	543	178	137	230	376
20	472	257	171	165	60	102	547	799	167	132	196	302
21	530	245	156	150	60	126	534	598	210	148	171	254
22	518	242	146	146	60	245	538	448	281	213	152	284
23	433	265	146	138	61	509	472	354	265	340	140	271
24	410	333	156	132	60	696	421	296	222	484	131	240
25	489	394	210	125	60	722	476	260	187	456	122	201
26	489	706	433	118	61	660	788	225	158	368	118	205
27	425	2410	576	113	61	555	873	191	138	376	110	394
28	368	3030	493	110	61	468	728	165	126	476	121	538
29	333	2140	402	106	58	476	738	142	116	464	122	440
30	302	1430	347	103	---	585	879	128	121	417	122	343
31	274	---	284	99	---	799	---	121	---	440	198	---
TOTAL	13679	19181	10858	4919	1972	7068	31754	11780	9011	9033	9813	7486
MEAN	441	639	350	159	68.0	228	1058	380	300	291	317	250
MAX	1010	3030	1010	268	95	799	3020	799	868	484	935	538
MIN	61	242	146	99	58	52	421	121	116	132	110	103
CFSM	2.30	3.33	1.82	.83	.35	1.19	5.51	1.98	1.56	1.52	1.65	1.30
IN.	2.65	3.72	2.10	.95	.38	1.37	6.15	2.28	1.75	1.75	1.90	1.45

CAL YR 1979 TOTAL 178864 MEAN 490 MAX 4510 MIN 42 CFSM 2.55 IN 34.65
WTR YR 1980 TOTAL 136554 MEAN 373 MAX 3030 MIN 52 CFSM 1.94 IN 26.46

01314500 INDIAN LAKE NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'20", long 74°16'35", Hamilton County, Hydrologic Unit 02020001, at Indian Lake Dam on Indian River, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--131 mi^2 (339 km^2).

PERIOD OF RECORD.--July 1900 to current year. Prior to October 1956, published as "Indian Lake Reservoir near Indian Lake."

GAGE.--Nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by masonry dam, completed in 1898. Usable capacity, about 4,500 mil ft^3 (127 hm^3) at elevation, 1,651.29 ft or 503.313 m (crest of spillway). Sills of double sluice gates at lowest outlet at elevation 1,615.50 ft (492.404 m). Dead storage unknown. Water is used for power development, for improvement of navigation in lower Hudson River, and to compensate for flow diverted from Hudson River at Glens Falls into Champlain (Barge) Canal.

COOPERATION.--Gage-height record furnished by Indian River Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,656.71 ft (504.965 m) Mar. 28, 1913, contents, 5,781 mil ft^3 (164 hm^3); minimum observed, 1,616.81 ft (492.804 m), estimated, Feb. 13, 1948, contents, 199 mil ft^3 (5.64 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 1,650.81 ft (503.167 m) Oct. 10, contents, 4,575 mil ft^3 (130 hm^3); minimum observed, 1,634.99 ft (498.34 m) Mar. 17, 19, 20, contents 1,957 mil ft^3 (55.4 hm^3).

Capacity table, current water year
(elevation, in feet and capacity, in billions of cubic feet)

1,635.0	1.958	1,643.0	3.221
1,636.0	2.110	1,648.0	4.068
1,638.0	2.417	1,653.0	5.007

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 0630

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1649.75	1648.76	1648.99	1646.38	1642.04	1637.10	1639.29	1647.69	1648.43	1649.72	1649.91	1649.00
2	1649.67	1648.62	1648.97	1646.29	1641.85	1636.99	1639.63	1647.84	1648.47	1649.71	1649.92	1649.00
3	1649.60	1648.62	1648.94	1646.14	1641.61	1636.86	1639.97	1647.91	1648.56	1649.68	1649.93	1649.00
4	1649.54	1648.55	1648.88	1645.99	1641.42	1636.69	1640.21	1647.91	1648.72	1649.64	1649.97	1648.95
5	1649.50	1648.49	1648.78	1645.84	1641.22	1636.54	1640.68	1647.93	1648.88	1649.64	1650.03	1648.90
6	1650.03	1648.73	1648.67	1645.68	1641.02	1636.34	1640.99	1647.93	1648.98	1649.57	1650.03	1648.84
7	1650.43	1648.32	1648.56	1645.55	1640.81	1636.26	1641.21	1647.86	1649.05	1649.56	1650.03	1648.73
8	1650.65	1648.23	1648.44	1645.42	1640.57	1636.11	1641.51	1647.86	1649.12	1649.53	1650.01	1648.65
9	1650.73	1648.10	1648.34	1645.27	1640.35	1636.00	1641.91	1647.83	1649.28	1649.55	1650.00	1648.53
10	1650.81	1648.24	1648.23	1645.11	1640.14	1635.85	1643.42	1647.76	1649.41	1649.52	1649.95	1648.44
11	1650.80	1648.39	1648.12	1644.96	1639.95	1635.79	1644.78	1647.73	1649.46	1649.51	1649.91	1648.38
12	1650.73	1648.49	1648.01	1645.00	1639.76	1635.59	1645.33	1647.64	1649.52	1649.45	1649.91	1648.25
13	1650.71	1648.51	1647.93	1645.01	1639.50	1635.40	1645.64	1647.67	1649.57	1649.41	1649.85	1648.19
14	1650.77	1648.46	1647.91	1644.97	1639.44	1635.34	1645.85	1647.73	1649.61	1649.39	1649.82	1648.16
15	1650.79	1648.39	1647.78	1644.93	1639.36	1635.24	1646.12	1647.79	1649.64	1649.35	1649.81	1648.03
16	1650.75	1648.32	1647.73	1644.85	1639.21	1635.16	1646.55	1647.85	1649.68	1649.41	1649.74	1647.97
17	1650.67	1648.23	1647.55	1644.79	1639.04	1634.99	1646.71	1647.87	1649.72	1649.48	1649.69	1647.88
18	1650.58	1648.08	1647.42	1644.67	1638.96	1635.07	1646.80	1647.91	1649.74	1649.47	1649.65	1647.86
19	1650.48	1647.91	1647.37	1644.49	1638.80	1634.99	1646.74	1648.01	1649.78	1649.49	1649.60	1647.79
20	1650.38	1647.85	1647.19	1644.33	1638.63	1634.99	1646.81	1648.13	1649.86	1649.53	1649.56	1647.75
21	1650.21	1647.71	1647.09	1644.11	1638.47	1635.05	1646.81	1648.22	1649.88	1649.61	1649.53	1647.66
22	1650.10	1647.61	1646.91	1643.99	1638.33	1635.79	1646.82	1648.26	1649.88	1649.71	1649.49	1647.62
23	1649.98	1647.49	1646.73	1643.83	1638.19	1636.48	1646.82	1648.32	1649.86	1649.76	1649.45	1647.58
24	1649.88	1647.38	1646.60	1643.63	1638.03	1637.01	1646.81	1648.34	1649.84	1649.78	1649.39	1647.47
25	1649.72	1647.23	1646.58	1643.43	1637.87	1637.37	1646.85	1648.34	1649.83	1649.79	1649.36	1647.41
26	1649.60	1647.30	1646.64	1643.24	1637.72	1637.61	1647.06	1648.32	1649.79	1649.81	1649.30	1647.37
27	1649.45	1647.98	1646.75	1643.05	1637.59	1637.84	1647.14	1648.30	1649.79	1649.85	1649.26	1647.29
28	1649.34	1648.71	1646.74	1642.87	1637.46	1637.99	1647.22	1648.30	1649.73	1649.88	1649.21	1647.21
29	1649.18	1649.01	1646.70	1642.64	1637.26	1638.24	1647.31	1648.27	1649.72	1649.88	1649.17	1647.11
30	1649.05	1649.09	1646.57	1642.47	---	1638.58	1647.58	1648.28	1649.65	1649.90	1649.11	1647.08
31	1648.91	---	1646.51	1642.26	---	1638.94	---	1648.38	---	1649.90	1649.09	---
MEAN	1650.09	1648.23	1647.67	1644.55	1639.47	1636.39	1644.69	1648.01	1649.45	1649.63	1649.67	1648.07
MAX	1650.81	1649.09	1648.99	1646.38	1642.04	1638.94	1647.58	1648.38	1649.88	1649.90	1650.03	1649.00
MIN	1648.91	1647.23	1646.51	1642.26	1637.26	1634.99	1639.29	1647.64	1648.43	1649.35	1649.09	1647.08
*	4.210	4.245	3.813	3.075	2.295	2.608	4.019	4.140	4.367	4.402	4.245	3.898
**	-58.6	+13.5	-161.3	-275.5	-311.3	+116.9	+544.4	+45.2	+87.6	+13.1	-58.6	-133.9

CAL YR 1979 MEAN 1646.01 MAX 1652.64 MIN 1630.71 ** +37.2
WTR YR 1980 MEAN 1646.35 MAX 1650.81 MIN 1634.99 ** -14.8

* Contents, in billions of cubic feet, at 2400 hours on last day of month, by interpolation.
** Change in contents, equivalent in cubic feet per second.

01315000 INDIAN RIVER NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'30", long 74°16'05", Hamilton County, Hydrologic Unit 02020001, on right bank 0.8 mi (1.3 km) downstream from Indian Lake Dam, 1.0 mi (1.6 km) upstream from Big Brook, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--July 1912 to June 1914, June 1915 to current year. Monthly discharge only for some periods published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 1,604.23 ft (488.969 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Indian Lake (see station 01314500).

AVERAGE DISCHARGE.--66 years (1913, 1916-80), 296 ft^3/s (8.383 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft^3/s (98.0 m^3/s) Mar. 28, 1913, gage height, 7.8 ft (2.38 m); minimum, less than 1 ft^3/s (0.028 m^3/s) frequently, when entire flow of river is being stored in Indian Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 588 ft^3/s (16.7 m^3/s) April 17, gage height, 3.02 ft (0.920 m); minimum, 20 ft^3/s (0.57 m^3/s) part or all of each day July 15-25, July 29-Aug. 4, gage height, 0.64 ft (0.195 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	448	445	423	493	341	83	347	24	102	20	190
2	197	449	444	422	490	341	83	347	25	102	21	191
3	197	451	443	421	486	341	131	347	28	102	21	189
4	197	448	443	420	486	338	292	346	26	102	21	190
5	203	448	442	419	486	338	292	347	24	102	21	190
6	208	447	440	418	486	338	294	347	24	101	21	190
7	197	447	440	417	488	338	297	347	24	102	100	189
8	196	446	438	415	486	329	299	346	24	102	100	188
9	218	445	437	414	482	320	315	345	25	102	100	188
10	372	452	437	414	482	319	343	345	24	102	100	187
11	373	449	436	417	482	316	416	344	24	102	100	187
12	374	449	436	421	482	313	502	224	24	102	100	187
13	374	448	435	413	482	313	563	101	24	101	100	187
14	373	447	434	413	474	312	566	101	24	101	103	187
15	406	447	434	411	250	306	571	101	24	80	102	185
16	506	446	433	411	373	304	575	101	24	21	102	185
17	507	446	432	415	370	303	583	101	24	20	102	186
18	503	445	432	519	367	308	550	102	24	20	102	185
19	502	444	431	520	367	306	441	102	24	20	102	185
20	499	443	430	520	367	305	441	102	41	21	102	184
21	492	443	429	518	360	326	441	102	102	21	102	183
22	479	441	427	517	357	335	380	102	102	21	102	183
23	463	440	426	514	354	330	341	102	102	21	102	183
24	457	440	424	512	350	334	341	102	102	21	102	182
25	452	440	428	509	350	338	343	102	102	21	102	182
26	450	450	426	506	347	278	343	102	102	21	102	182
27	449	449	425	507	345	76	343	102	102	21	102	182
28	448	447	425	505	341	80	343	102	102	21	102	182
29	446	446	424	502	341	82	347	90	102	21	118	182
30	445	446	424	499	---	84	347	23	103	21	190	181
31	447	---	424	498	---	82	---	24	---	20	190	---
TOTAL	11627	13387	13424	14230	12024	8774	11206	5796	1526	1837	2854	5572
MEAN	375	446	433	459	415	283	374	187	50.9	59.3	92.1	186
MAX	507	452	445	520	493	341	583	347	103	102	190	191
MIN	196	440	424	411	250	76	83	23	24	20	20	181

CAL YR 1979 TOTAL 123299 MEAN 338 MAX 940 MIN 20
WTR YR 1980 TOTAL 102257 MEAN 279 MAX 583 MIN 20

01315500 HUDSON RIVER AT NORTH CREEK, NY

LOCATION.--Lat 43°42'03", long 73°59'02", Warren County, Hydrologic Unit 02020001, on left bank 125 ft (38 m) upstream from bridge on State Highway 28N in village of North Creek, 500 ft (152 m) upstream from North Creek, and 26 mi (42 km) downstream from Indian Lake.

DRAINAGE AREA.--792 mi^2 (2,051 km^2).

PERIOD OF RECORD.--September 1907 to current year.

REVISED RECORDS.--WSP 621: Drainage area. WSP 1432: 1908-18, 1920, 1922. WDR NY-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 987.51 ft (300.993 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1930, nonrecording gages at sites 80 ft (24 m) and 125 ft (38 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Appreciable regulation by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--73 years, 1,559 ft^3/s (44.15 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft^3/s (818 m^3/s) Dec. 31, 1948, gage height, 12.14 ft (3.700 m); minimum, 112 ft^3/s (3.17 m^3/s) July 26, 1934, gage height, 1.96 ft (0.597 m); minimum daily, 114 ft^3/s (3.23 m^3/s) July 26, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,800 ft^3/s (476 m^3/s) Apr. 10, gage height, 9.88 ft (3.011 m) minimum, 316 ft^3/s (8.95 m^3/s) Aug. 28, gage height, 2.43 ft (0.741 m); minimum daily, 317 ft^3/s (8.98 m^3/s) Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	563	1300	3510	1340	780	540	3660	3280	674	762	631	583
2	386	1330	2860	1100	760	520	3410	2960	927	789	592	709
3	500	1870	2480	960	740	540	3110	2770	1320	720	568	854
4	514	2330	2210	820	740	540	3420	2490	3060	612	601	886
5	535	2190	2000	800	720	560	4510	2270	2980	534	1260	748
6	4150	1950	1830	780	720	565	3800	2020	2420	488	1290	635
7	4670	1780	1790	760	700	584	3450	1700	1910	494	962	558
8	3460	1690	1730	780	700	570	3910	1820	1610	539	765	507
9	2730	1640	1660	800	680	609	7090	1910	1480	816	651	471
10	2420	2410	1540	809	660	608	15700	1760	1440	904	827	447
11	2130	2970	1480	856	660	586	10700	1570	1260	794	682	430
12	1920	2740	1550	1620	640	560	6920	1350	1070	700	588	418
13	2070	2350	1770	1720	620	540	5820	1290	920	616	563	405
14	2100	2050	1750	1500	540	520	5350	1390	803	544	581	427
15	1980	1840	1620	1400	400	540	5690	1250	709	496	571	489
16	2180	1680	1400	1300	450	560	5770	1230	714	450	593	610
17	1900	1540	1200	1200	500	600	4510	1120	694	406	577	645
18	1970	1470	1000	1200	560	700	3570	1080	644	414	533	675
19	1880	1420	880	1200	600	880	2950	1320	567	358	499	783
20	1810	1360	800	1100	710	1000	2610	1700	545	327	463	774
21	1740	1320	800	1000	632	1500	2550	1670	683	342	427	686
22	1720	1290	820	980	665	4970	2400	1410	787	444	395	679
23	1600	1320	880	960	660	4230	2160	1200	790	653	375	733
24	1670	1370	1060	900	632	3830	2030	1060	708	755	355	682
25	1870	1510	1560	880	600	3620	2090	938	624	762	338	592
26	1810	3860	2480	880	600	3040	2830	827	552	651	327	606
27	1650	12000	2550	860	600	2300	3040	733	499	655	322	704
28	1530	9990	2260	840	580	2200	2850	664	458	1170	317	922
29	1460	6200	1870	820	560	2550	3340	613	432	775	345	886
30	1420	4610	1660	820	---	3270	3570	560	463	706	371	750
31	1360	---	1520	800	---	3560	---	486	---	667	446	---
TOTAL	57698	81380	52520	31785	18409	47192	132810	46441	31743	19343	17815	19294
MEAN	1861	2713	1694	1025	635	1522	4427	1498	1058	624	575	643
MAX	4670	12000	3510	1720	780	4970	15700	3280	3060	1170	1290	922
MIN	386	1290	800	760	400	520	2030	486	432	327	317	405

CAL YR 1979 TOTAL 735992 MEAN 2016 MAX 20000 MIN 227
WTR YR 1980 TOTAL 556430 MEAN 1520 MAX 15700 MIN 317

01318500 HUDSON RIVER AT HADLEY, NY

LOCATION.--Lat 43°19'08", long 73°50'41", Saratoga County, Hydrologic Unit 02020001, on right bank at Hadley, 400 ft (122 m) downstream from outlet of Lake Luzerne, and 0.3 mi (0.5 km) upstream from Sacandaga River.

DRAINAGE AREA.--1,664 mi^2 (4,310 km^2).

PERIOD OF RECORD.--July 1921 to current year.

REVISED RECORDS.--WSP 561: 1921-22. WSP 756: Drainage area. WSP 1432: 1931 (m).

GAGE.--Water-stage recorder. Datum of gage is 563.99 ft (171.904 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are fair. Some diurnal fluctuation caused by powerplant on Schroon River. Flow regulated by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--59 years, 2,909 ft^3/s (82.38 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,700 ft^3/s (1,210 m^3/s) Jan. 1, 1949, gage height, 21.21 ft (6.465 m); minimum, 281 ft^3/s (7.96 m^3/s) Sept. 3, 1934, gage height, 0.94 ft (0.287 m); minimum daily, 292 ft^3/s (8.27 m^3/s) July 24, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft^3/s (420 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	2100	16,400	464	10.44	3.182
Apr. 10	1600	*22,700	643	*13.03	3.972

Minimum discharge, 432 ft^3/s (12.2 m^3/s) Aug. 29, gage height, 1.44 ft (0.439 m); minimum daily, 440 ft^3/s (12.5 m^3/s) Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1100	1900	7130	2300	1200	800	6640	6280	1280	926	991	628
2	1040	1870	5940	2100	1190	700	6590	5780	1610	1210	963	958
3	893	2400	5220	1800	1140	700	6180	5410	2020	1210	930	1240
4	1040	3210	4710	1600	1090	760	6470	5020	3730	1110	916	1190
5	1020	3200	4300	1570	1100	800	7860	4630	4390	976	883	1070
6	2860	2950	3960	1520	1000	873	7380	4290	3870	910	927	919
7	5880	2740	3750	1420	1000	859	6340	4000	3410	833	1290	792
8	4750	2630	3590	1300	1000	863	6490	3820	3110	867	1670	705
9	3770	2530	3270	1300	1000	882	8640	3720	2760	1020	1570	640
10	3280	3110	3070	1400	1000	957	21000	3620	2610	1260	1320	610
11	2970	4070	2940	1470	1000	950	18000	3420	2390	1270	1140	573
12	2800	4040	2870	2190	1000	961	13000	3240	2140	1150	989	556
13	3040	3620	2990	2570	1000	797	10900	2980	1920	1040	894	533
14	3140	3240	3080	2550	1000	848	10000	2860	1740	938	848	550
15	2960	2960	2870	3040	929	800	10700	2850	1570	854	834	586
16	2940	2740	2400	2800	702	912	11200	2630	1540	816	799	642
17	3010	2560	2000	2470	684	910	9550	2480	1500	745	810	776
18	2790	2430	1700	2360	740	1370	8110	2400	1340	689	772	845
19	2690	2330	1600	2200	800	1730	6860	2700	1190	661	727	876
20	2610	2240	1600	2100	922	1870	6100	3050	1140	612	680	965
21	2520	2160	1700	2020	1020	2810	5670	3120	1200	624	633	925
22	2470	2110	1700	1730	998	11000	5300	2850	1340	715	590	850
23	2380	2090	1800	1700	907	8610	4920	2570	1380	814	552	867
24	2280	2110	1970	1600	968	6930	4480	2320	1290	963	523	881
25	2460	2210	2370	1480	980	7120	4300	2130	1180	1040	501	835
26	2510	3090	3800	1500	900	6510	4870	1940	1080	995	479	918
27	2380	14700	4190	1500	800	5740	5240	1760	969	887	461	881
28	2230	14300	3700	1500	740	5450	5110	1610	867	948	451	1010
29	2120	10800	3260	1400	760	5900	6270	1500	807	1090	440	1160
30	2050	8640	2980	1300	---	7210	6790	1390	786	1110	468	1080
31	1970	---	2720	1230	---	7170	---	1290	---	1040	570	---
TOTAL	79953	118980	99180	57020	27570	93792	240960	97660	56159	29323	25621	25061
MEAN	2579	3966	3199	1839	951	3026	8032	3150	1872	946	826	835
MAX	5880	14700	7130	3040	1200	11000	21000	6280	4390	1270	1670	1240
MIN	893	1870	1600	1230	684	700	4300	1290	786	612	440	533

CAL YR 1979 TOTAL 1322500 MEAN 3623 MAX 24800 MIN 477
WTR YR 1980 TOTAL 951279 MEAN 2599 MAX 21000 MIN 440

01321000 SACANDAGA RIVER NEAR HOPE, NY

LOCATION.--Lat 43°21'10", long 74°16'15", Hamilton County, Hydrologic Unit 02020002, on left bank 1.5 mi (2.4 km) downstream from West Branch Sacandaga River, on State Highway 30, and 4.5 mi (7.2 km) upstream from Hope.

DRAINAGE AREA.--491 mi^2 (1,272 km^2).

PERIOD OF RECORD.--September 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 881.31 ft (268.623 m) National Geodetic Vertical Datum of 1929. Prior to July 24, 1929, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Some seasonal regulation at Piseco Lake Outlet and, since 1959, intermittent regulation by Lake Algonquin at Wells 4 mi (6 km) upstream. Infrequent minor fluctuations by mill upstream.

AVERAGE DISCHARGE.--69 years, 1,102 ft^3/s (31.21 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft^3/s (906 m^3/s) Mar. 27, 1913, gage height, 11.0 ft (3.35 m), from floodmarks at site then in use; minimum, about 16 ft^3/s (0.45 m^3/s) Sept. 30, 1913, gage height, 1.17 ft (0.357 m); minimum daily, 18 ft^3/s (0.51 m^3/s) Sept. 20, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 9,100 ft^3/s (258 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0230	*14,900	422	*7.93	2.417	Apr. 9	2000	14,800	419	7.90	2.408
Mar. 23	0300	14,400	408	7.82	2.384						

Minimum discharge, 46 ft^3/s (1.30 m^3/s) Aug. 29, 30, gage height, 1.29 ft (0.393 m); minimum daily, 48 ft^3/s (1.36 m^3/s) Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	471	2000	700	250	110	3330	2320	293	152	191	182
2	201	475	1600	600	230	110	3300	1980	461	207	211	647
3	201	832	1370	500	210	110	2970	1780	702	194	221	939
4	205	1200	1210	430	210	130	4100	1590	1440	146	256	575
5	431	1020	1080	380	200	160	4540	1400	1040	127	234	434
6	5200	887	986	350	190	210	3290	1270	887	158	316	530
7	2350	811	934	450	190	210	3410	1170	1020	145	369	427
8	1760	736	939	480	190	230	3580	1090	1200	132	372	349
9	1460	717	774	400	180	240	8140	1010	1130	165	393	279
10	1390	2040	825	370	180	240	11300	931	1020	162	340	239
11	1190	2150	777	636	180	240	6870	877	879	137	296	198
12	1170	1560	835	1030	180	240	4980	807	685	133	259	190
13	1890	1360	1080	971	180	280	4380	761	634	119	218	144
14	1720	1150	1000	900	180	320	3800	872	567	107	186	148
15	1350	1050	899	900	180	270	5020	809	491	100	173	160
16	1280	949	760	900	170	300	4350	735	520	99	158	148
17	1150	844	600	820	170	400	3300	673	492	134	127	148
18	1030	792	500	740	170	700	2770	697	431	116	120	202
19	919	747	450	660	160	1000	2380	1230	378	97	115	198
20	752	703	450	600	160	1500	2130	1220	387	138	115	182
21	764	663	500	560	160	3700	1930	1070	525	273	108	175
22	701	628	560	520	160	9630	1720	847	464	603	101	164
23	649	581	420	470	160	5060	1540	660	392	517	95	156
24	649	588	420	410	160	4500	1420	558	333	392	72	137
25	685	723	1240	400	150	4070	1540	490	270	305	60	137
26	636	2760	1860	380	150	3260	1740	420	196	244	55	225
27	586	9620	1530	360	150	2760	1630	368	178	206	53	230
28	552	4230	1250	330	150	2100	1600	324	167	182	50	216
29	540	3120	1120	320	140	3180	2830	291	139	195	48	211
30	519	2480	980	310	---	4560	2680	266	131	269	50	202
31	491	---	795	270	---	4120	---	252	---	229	126	---
TOTAL	32628	45887	29744	17147	5140	53940	106570	28768	17452	6183	5488	8172
MEAN	1053	1530	959	553	177	1740	3552	928	582	199	177	272
MAX	5200	9620	2000	1030	250	9630	11300	2320	1440	603	393	939
MIN	201	471	420	270	140	110	1420	252	131	97	48	137

CAL YR 1979 TOTAL 510460 MEAN 1399 MAX 12500 MIN 68
WTR YR 1980 TOTAL 357119 MEAN 976 MAX 11300 MIN 48

01323500 GREAT SACANDAGA LAKE AT CONKLINGVILLE, NY

LOCATION.--Lat 43°18'57", long 73°55'39", Saratoga County, Hydrologic Unit 02020002, 800 ft (244 m) upstream from right end of Conklingville Dam on Sacandaga River at Conklingville.

DRAINAGE AREA.--1,044 mi² (2,704 km²).

PERIOD OF RECORD.--January 1930 to current year. Prior to October 1969, published as "Sacandaga Reservoir at Conklingville."

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to Apr. 23, 1930, nonrecording gage at same datum in outlet channel 800 ft (244 m) downstream.

REMARKS.--Reservoir is formed by earth and concrete dam; storage began in March 1930; dam completed in 1930. Usable capacity for stream regulation, 29,670 mil ft³ (840.3 hm³) between elevations 735.0 ft (224.03 m) and 768.0 ft (234.09 m). Between elevations 768.0 ft (234.09 m) and 771.0 ft (235.00 m) (spillway crest) an additional 3,450 mil ft³ (97.7 hm³) is available exclusively for flood storage. Elevation of inverts of three Dow valves is 699.0 ft (213.06 m). Capacity of 4,600 mil ft³ (130 hm³) below elevation 735.0 ft (224.03 m) is considered dead storage, except for extraordinary emergencies or for necessary inspection of structures. Purpose of reservoir is to provide flood control and low-water stream regulation for sanitary improvement, navigation, and power, as required by the public welfare, including public health and saftey. Area of water surface of reservoir filled to capacity, elevation, 771.0 ft (235.00 m), is 41.7 mi² (108 km²).

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 770.78 ft (234.934 m) June 26, 1972, contents, 37,470 mil ft³ (1,061 hm³); minimum since first filling, 729.55 ft (222.367 m) Mar. 30, 1940, contents, 2,100 mil ft³ (59.5 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 768.50 ft (234.239 m) May 12, contents, 34,840 mil ft³ (987 hm³); minimum, 739.33 ft (225.348 m) Mar. 19, contents, 7,330 mil ft³ (207.6 hm³).

Capacity table, current water year
(elevation, in feet, and contents, in billions of cubic feet)

738	6.43	760	25.61
740	7.80	764	29.85
745	11.64	768	34.27
750	15.94	771	37.72
755	20.11		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	756.27	755.15	755.74	750.25	745.90	741.47	751.25	766.73	767.72	765.82	762.37	758.56
2	756.12	755.00	755.83	749.99	745.72	741.37	751.84	767.03	767.72	765.68	762.29	758.55
3	756.01	754.96	755.94	749.70	745.64	741.30	752.40	767.28	767.75	765.56	762.28	758.49
4	755.90	755.05	755.86	749.39	745.60	741.10	753.08	767.48	767.81	765.47	762.16	758.40
5	755.80	755.14	755.72	749.06	745.42	740.90	753.96	767.66	767.86	765.43	762.00	758.34
6	756.38	755.03	755.53	748.74	745.25	740.71	754.60	767.84	767.86	765.38	761.91	758.31
7	756.87	754.90	755.32	748.40	745.06	740.50	755.15	767.96	767.86	765.34	761.79	758.22
8	757.11	754.80	755.11	748.20	744.89	740.33	755.67	768.10	767.92	765.17	761.70	758.18
9	757.08	754.63	755.10	747.95	744.71	740.30	756.37	768.20	768.05	765.11	761.63	758.03
10	757.08	754.59	755.07	747.70	744.64	740.24	758.11	768.30	767.97	764.93	761.57	757.89
11	757.03	754.75	754.82	747.45	744.60	740.11	759.41	768.38	767.80	764.81	761.46	757.74
12	757.01	754.93	754.60	747.38	744.38	739.96	760.15	768.46	767.63	764.68	761.36	757.42
13	757.10	754.86	754.35	747.32	744.18	739.79	760.81	768.38	767.46	764.56	761.19	757.25
14	757.22	754.81	754.20	747.38	744.01	739.70	761.24	768.35	767.28	764.51	761.04	757.20
15	757.37	754.73	753.97	747.35	743.82	739.59	761.88	768.32	767.18	764.36	760.96	757.13
16	757.26	754.64	753.73	747.31	743.62	739.50	762.60	768.23	767.23	764.21	760.75	756.99
17	757.18	754.50	753.49	747.26	743.58	739.48	763.08	768.15	767.15	764.06	760.70	756.83
18	757.06	754.40	753.20	747.20	743.58	739.44	763.47	768.19	767.03	763.88	760.56	756.71
19	756.92	754.38	752.87	747.12	743.35	739.42	763.73	768.30	766.90	763.75	760.40	756.56
20	756.78	754.23	752.57	747.11	743.18	739.48	764.03	768.33	766.82	763.69	760.18	756.41
21	756.75	754.05	752.27	747.12	742.95	739.71	764.28	768.33	766.72	763.68	760.02	756.32
22	756.74	753.88	751.97	747.03	742.78	742.10	764.46	768.33	766.72	763.56	759.84	756.32
23	756.58	753.70	751.68	746.94	742.62	744.10	764.66	768.23	766.68	763.44	759.66	756.20
24	756.48	753.53	751.40	746.85	742.51	745.23	764.85	768.13	766.58	763.33	759.64	755.99
25	756.31	753.49	751.22	746.72	742.42	746.23	765.03	768.08	766.45	763.22	759.48	755.82
26	756.07	753.62	751.26	746.55	742.27	747.04	765.27	768.12	766.33	763.05	759.28	755.96
27	755.88	754.64	751.24	746.51	742.08	747.60	765.43	768.05	766.19	763.92	759.11	755.78
28	755.81	755.37	751.12	746.50	741.90	748.11	765.59	767.93	766.02	762.92	758.88	755.71
29	755.88	755.60	750.95	746.38	741.69	748.66	765.97	767.85	765.96	762.76	758.70	755.64
30	755.58	755.78	750.75	746.22	---	749.59	766.40	767.76	765.90	762.68	758.51	755.54
31	755.36	---	750.50	746.05	---	750.50	---	767.70	---	762.52	758.55	---
MEAN	756.55	754.64	753.46	747.58	743.87	742.37	760.49	768.01	767.15	764.24	760.64	757.08
MAX	757.37	755.78	755.94	750.25	745.90	750.50	766.40	768.46	768.05	765.82	762.37	758.56
MIN	755.36	753.49	750.50	746.05	741.69	739.42	751.25	766.73	765.90	762.52	758.51	755.54
*	20.85	21.36	16.28	12.45	8.97	16.76	32.68	33.91	31.90	28.16	24.11	21.05
**	-399	+197	-1897	-1430	-1389	+2908	+6142	+459	-775	-1396	-1512	-1181

CAL YR 1979 MEAN 758.07 MAX 770.18 MIN 744.24 ** +116
WTR YR 1980 MEAN 756.37 MAX 768.46 MIN 739.42 ** -28

* Contents, in billions of cubic feet, at 2400 hours on last day of month.
** Change in contents, equivalent in cubic feet per second.

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY

LOCATION.--Lat 43°18'41", long 73°52'04", Saratoga County, Hydrologic Unit 02020002, on left bank 1.0 mi (1.6 km) downstream from Stewarts Bridge, 1.1 mi (1.8 km) west of Hadley, 1.4 mi (2.3 km) upstream from mouth, and 1.5 mi (2.4 km) downstream from Stewarts Bridge hydroelectric plant.

DRAINAGE AREA.—1,055 mi² (2,732 km²).

PERIOD OF RECORD.--September 1907 to current year. Published as "near Hadley" 1907-1910, "at Hadley" 1911-32 and "at Conklingville" 1932-52. Records published for both sites October 1951 to September 1952.

REVISED RECORDS.--WSP 1302: 1908. WSP 1432: 1910-12, 1916-21.

GAGE.--Water-stage recorder. Datum of gage is 582.00 ft (177.394 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1911, nonrecording gage at site about 1 mi (2 km) upstream at different datum. Jan. 1, 1911 to Sept. 30, 1932, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 8.82 ft (2.688 m) lower than present datum. Oct. 1, 1932 to Sept. 30, 1952, water-stage recorder at site 3.6 mi (5.8 km) upstream at datum 85.47 ft (26.051 m) higher than present datum.

REMARKS.--Records good above 10 ft³/s (0.28 m³/s) and fair below. Flow regulated by Great Sacandaga Lake since Mar. 27, 1930 (see station 01323500); no discharge over spillway during year. Extensive diurnal fluctuation caused by release of water from Great Sacandaga Lake, through Elmer J. West hydroelectric station as directed by Board of Hudson River-Black River Regulating District, and through Stewarts Bridge hydroelectric station.

COOPERATION.--From Oct. 1, 1932, to Dec. 4, 1979 discharge computed by Board of Hudson River-Black River Regulating District from rating developed by Geological Survey. Since Dec. 4, 1979, discharge computed by U.S. Geological Survey.

AVERAGE DISCHARGE.--73 years, 2,143 ft³/s (60.69 m³/s), adjusted for storage since 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 35,500 ft³/s (1,010 m³/s) Mar. 28, 1913, gage height, 12.36 ft (3.767 m) site and datum then in use; minimum, 5.3 ft³/s (0.15 m³/s) Mar. 17, 18, 1964, Apr. 29 to May 4, May 5, 6, 1965; minimum daily, 5.3 ft³/s (0.15 m³/s) Apr. 30 to May 3, 1965. Maximum discharge since construction of Conklingville Dam in 1930, 13,300 ft³/s (377 m³/s) July 1, 1968, gage height, 9.54 ft (2.908 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,600 ft³/s (159 m³/s) Jan. 9, gage height, 6.26 ft (1.908 m); minimum 6.8 ft³/s (0.19 m³/s) Apr. 3, 7, 8, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1990	3070	2990	3990	1990	1960	8.5	22	31	2020	2060	27
2	1980	3070	175	4000	1970	40	7.8	22	1350	2040	2070	2160
3	2190	3040	2920	4020	51	1940	7.4	21	1350	2010	50	1850
4	2170	117	2910	4020	1970	1970	9.9	21	1330	43	1990	1860
5	2190	2940	2990	3970	1980	1990	9.8	20	1370	1810	1850	1940
6	2160	3060	4050	4040	2020	1970	8.1	20	1350	43	2120	1830
7	73	3080	4050	4020	2010	2000	7.5	22	1500	2000	2010	51
8	2100	3060	4000	3020	2000	2020	7.4	189	47	2040	1690	2280
9	2160	3050	171	3280	1960	47	15	23	2430	2010	1650	2180
10	2510	3080	2940	3070	47	1980	16	23	3030	2030	51	2200
11	2560	130	4100	3070	2000	1700	11	23	3020	2030	1970	2360
12	2530	2970	4070	2990	2050	1680	9.5	2010	3010	2020	2070	2340
13	2520	3070	4050	175	2010	1700	9.0	1990	3010	48	2010	2310
14	52	3040	4040	2840	2010	1670	8.6	2010	2980	2020	2000	49
15	2940	3040	4050	2580	2010	1660	12	2040	114	2030	2180	2370
16	3010	3040	4050	2480	2010	46	9.5	2000	2020	2180	2170	2350
17	3070	3070	4040	2500	58	1690	8.4	1970	2010	2170	54	2180
18	3050	133	4040	2520	1560	2050	7.9	52	2020	2140	2170	2020
19	3050	2960	4020	2530	2010	2030	7.6	1970	2040	2020	2240	2060
20	3060	3070	4040	57	2030	1630	7.5	2020	2020	39	2230	2010
21	158	3130	4050	1980	2020	2260	7.6	1990	2020	2460	2190	52
22	2790	3080	4020	2050	2010	1590	7.6	2070	48	2190	2220	2010
23	3030	3040	3970	2010	2030	33	27	2050	1990	2160	2210	2020
24	3120	3070	4000	2030	49	24	20	2050	2030	1990	59	2010
25	3080	131	3960	2000	1990	28	20	49	2040	2020	2420	1990
26	3070	2930	3970	2000	2050	24	21	1100	2010	2080	2390	1990
27	3070	3080	4020	64	1980	24	21	2130	2020	42	2280	1940
28	128	3080	3990	1960	1960	21	23	1420	1990	2150	2370	45
29	2910	3030	3970	2010	1990	24	26	1320	42	2010	2370	1950
30	3080	3070	4000	2030	---	26	23	1340	2010	2020	2440	1860
31	3070	---	4000	2000	---	18	---	1360	---	1990	71	---
TOTAL	72871	79731	111646	79306	49825	35845	384.6	33347	52232	53855	55655	52294
MEAN	2351	2658	3601	2558	1718	1156	12.8	1076	1741	1737	1795	1743
MAX	3120	3130	4100	4040	2050	2260	27	2130	3030	2460	2440	2370
MIN	52	117	171	57	47	18	7.4	20	31	39	50	27

Adjusted for change in contents in Great Sacandaga Lake and Stewarts Bridge Pool

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1949	2855	1704	1128	328	3989	6204	1564	966	342	282	562
CFSM	1.85	2.71	1.62	1.07	.31	3.78	5.88	1.48	.92	.32	.27	.53
IN	2.13	3.02	1.86	1.23	.33	4.36	6.56	1.71	1.02	.37	.31	.59

		Observed							Adjusted				
CAL YR 1979	TOTAL	949063.5	MEAN	2600	MAX	10600	MIN 7.0	MEAN	2716	CFSM	2.57	IN	34.95
WTR YR 1980	TOTAL	676991.6	MEAN	1850	MAX	4100	MIN 7.4	MEAN	1822	CFSM	1.73	IN	23.51

01327500 GLENS FALLS FEEDER AT DUNHAM BASIN, NY

LOCATION.--Lat 43°18'15", long 73°32'49", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 100 ft (30 m) upstream from Bond Creek, 2.0 mi (3.2 km) east of courthouse at Hudson Falls, and 8.0 mi (12.9 km) downstream from Hudson River feeder dam at Glens Falls.

PERIOD OF RECORD.--September 1945 to July 1980 (discontinued) (navigation seasons only).

GAGE.--Water-stage recorder. Datum of gage is 139.88 ft (42.635 m) Barge Canal datum.

REMARKS.--Records fair. Feeder flow during navigation season is net diversion from Hudson River basin to the summit level of the Champlain (Barge) Canal, 0.4 mi (0.6 km) downstream, and is diverted in accordance with requirements of the canal. Flow during remainder of year consists of leakage through headgates and inflow from area tributary to feeder above station, which may continue during period of nonoperation. During navigation season a portion of the flow is rediverted into Lake Champlain basin; the remainder returns to the Hudson River in southbound lockages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	92	124				---	99	102	76		
2	107	92	114				---	94	95	79		
3	108	140	108				---	85	102	70		
4	127	112	112				---	77	93	69		
5	114	87	110				---	75	125	78		
6	140	98	62				---	80	128	88		
7	160	99	2.8				---	82	130	70		
8	160	98	---				---	73	112	45		
9	170	96	---				2.3	70	89	3.7		
10	140	118	---				5.9	69	112	89		
11	96	108	---				2.5	59	120	95		
12	107	94	---				2.0	32	106	93		
13	116	98	---				13	107	139	105		
14	101	99	---				36	101	123	91		
15	92	98	---				74	92	117	16		
16	99	96	---				70	94	108	85		
17	99	92	---				64	78	62	91		
18	96	82	---				58	82	75	88		
19	96	73	---				53	91	98	85		
20	92	87	---				49	84	92	94		
21	89	89	---				30	86	103	87		
22	82	87	---				36	90	99	88		
23	91	85	---				32	78	104	102		
24	91	84	---				32	80	99	89		
25	96	91	---				33	77	91	---		
26	92	130	---				65	58	98	---		
27	92	150	---				72	65	86	---		
28	87	150	---				80	57	82	---		
29	72	147	---				105	82	89	---		
30	84	133	---				108	85	76	---		
31	89	---	---				---	81	---	---		
TOTAL	3283	3105	---				---	2463	3055	---		
MEAN	106	104	---				---	79.5	102	---		
MAX	170	150	---				---	107	139	---		
MIN	72	73	---				---	32	62	---		

01327750 HUDSON RIVER AT FORT EDWARD, NY

LOCATION.--Lat 43°16'10", long 73°35'47", Washington County, Hydrologic Unit 02020003, on left bank 40 ft (12 m) upstream from Scott Paper Mill, 150 ft (46 m) south of River Street in Fort Edward, and 0.4 mi (0.6 km) upstream from bridge on State Highway 197.

DRAINAGE AREA.--2,817 mi^2 (7,296 km^2).

PERIOD OF RECORD.--December 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated appreciably by Great Sacandaga Lake (see station 01323500) and Indian Lake (see station 01314500). Diurnal fluctuation caused by powerplants upstream from station. Water is diverted into St. Lawrence River basin through Glens Falls feeder (see station 01327500), Bond Creek (see station 01328000), and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft^3/s (963 m^3/s) Apr. 29, 1979, gage height 28.09 ft (8.562 m); maximum gage height, 28.71 ft (8.751 m) Jan. 11, 1978, ice jam; minimum discharge, 311 ft^3/s (8.81 m^3/s) July 3, 1980, minimum gage height, 19.33 ft (5.892 m), Sept. 4, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,300 ft^3/s (660 m^3/s) Apr. 10, gage height, 25.68 ft (7.827 m); minimum discharge, 311 ft^3/s (8.81 m^3/s) July 3, gage height, 19.59 ft (5.971 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2620	4900	9640	6170	3570	3020	6770	6250	1470	2570	2700	928
2	3080	4790	7110	6050	2970	1300	6450	5930	2650	3360	2880	2280
3	2800	4790	6530	6010	1840	2420	6490	5660	3360	2780	1230	3160
4	3300	5040	7410	5510	3050	2730	6090	4970	3720	1630	2520	3130
5	3130	4030	6980	5370	3050	2910	7580	4550	5220	2180	2860	2970
6	3660	5860	7370	5400	3100	3050	7500	4760	5440	1180	3100	2940
7	6250	5700	7430	5220	3130	2730	7020	4060	4860	2750	2860	1320
8	5660	5480	7190	4550	3020	2990	6170	3840	4030	2670	2860	2250
9	5740	5330	5440	4550	3390	1490	6810	3600	3750	2940	3240	3080
10	5590	5400	4520	4320	2140	2730	18400	3750	4830	3130	1770	2670
11	5370	5590	6370	4420	2500	2670	20600	3600	5180	3190	2800	2520
12	5370	4790	6690	4690	2830	3020	14700	4350	5260	3190	3050	2700
13	5260	6650	6570	4000	2970	2730	10400	4970	4790	1360	2990	2990
14	4790	6090	6810	4260	3100	2670	9490	4720	4520	2570	2700	1180
15	4030	5820	6770	5370	2860	2370	9790	4720	2780	3160	2970	2240
16	5480	5780	6570	5510	2860	1020	10700	4590	3510	2910	2670	3520
17	5740	5480	6370	5080	1400	2730	9690	4390	3420	2940	1060	2670
18	5740	4090	6010	4900	1870	3330	8120	3020	3270	2830	2570	2820
19	5660	4000	5370	4760	2700	4090	7240	4160	2990	2520	2780	2720
20	5480	4860	5440	3300	3130	3870	6330	4720	3020	1270	2730	2960
21	4250	4830	5510	3510	2860	3780	5820	4900	3020	2370	2730	1320
22	3960	5080	5400	4000	2970	12000	5510	4930	1360	2780	2830	2390
23	5080	4860	5480	3510	3160	9940	5260	4350	3270	3080	2670	2620
24	5400	5000	5700	4030	2090	7370	4690	4390	3420	3130	1050	2730
25	4790	3510	5930	4390	2400	6940	4390	3300	3020	2780	2470	2970
26	5510	4420	7410	3570	2700	7020	4390	2670	3190	2620	2700	2740
27	5400	14300	7630	2400	2860	6010	5000	3510	2970	1440	2670	2980
28	4160	18800	7190	3240	2730	5400	5260	3160	2880	2520	2670	1490
29	3390	14300	7190	3570	2600	5550	5290	2670	1210	2880	2670	3120
30	4660	11200	6690	3600	---	7280	6900	2400	2420	3360	2650	3130
31	4860	---	6770	3480	---	7410	---	2570	---	3240	1060	---
TOTAL	146210	190770	203490	138740	79850	132570	238850	129460	104830	81330	78510	76538
MEAN	4716	6359	6564	4475	2753	4276	7962	4176	3494	2624	2533	2551
MAX	6250	18800	9640	6170	3570	12000	20600	6250	5440	3360	3240	3520
MIN	2620	3510	4520	2400	1400	1020	4390	2400	1210	1180	1050	928

CAL YR 1979 TOTAL 2206340 MEAN 6045 MAX 31700 MIN 1030
WTR YR 1980 TOTAL 1601148 MEAN 4375 MAX 20600 MIN 928

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY

LOCATION.--Lat 43°15'52", long 73°35'28", Saratoga-Washington Counties, Hydrologic Unit 02020003, at bridges on State Highway 197 over Rogers Island in Fort Edward, 0.4 mi (0.6 km) downstream from discharge station (01327750, Hudson River at Fort Edward), and 0.6 mi (1.0 km) upstream from Champlain Canal.

DRAINAGE AREA.--2,817 mi^2 (7,296 km^2), at gage.

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (a), 1980 (b).
MINOR ELEMENT DATA: 1975 (b), 1976-77 (a), 1978-79 (e), 1980 (d).
PESTICIDE DATA: 1975, 1977 (a); 1978-79 (e), 1980 (a).
ORGANIC DATA: OC--1975 (a).
PCB--1975, 1977 (a); 1978-80 (e).
PCN--1977 (a), 1978-79 (e), 1980 (a).
NUTRIENT DATA: 1975-77 (a), 1978 (e).
SEDIMENT DATA: 1975 (b), 1980 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1978 to September 1979.

REMARKS.--Water-discharge data is that for Hudson River at Fort Edward (station 01327750). Supplemental samples collected from navigation canal (east channel) are designated by the value 40 for sample source code.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE SOURCE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT												
31...a/	0800	—	4490	—	—	9	0	170	20	.1	2	24
31...b/	0845	40	4390	—	—	8	3	—	—	.2	2	24
NOV												
27...	0915	—	8860	—	—	8	7	220	20	.0	4	96
27...	0930	40	9290	—	—	4	0	—	—	.1	6	150
28...	1100	—	17700	—	—	23	5	870	80	.0	25	1200
28...	1145	40	17700	—	—	22	0	—	—	.2	16	765
DEC												
27...	0815	—	7760	—	—	7	6	—	—	.0	3	63
27...	0845	40	7800	—	—	—	—	—	—	—	3	63
MAR												
22...	0945	—	12600	—	—	28	4	450	40	—	20	680
22...	1015	40	12600	—	—	17	4	420	60	—	17	578
22...	1500	—	14400	73	7.0	0	0	350	40	.1	15	583
22...	1530	40	14600	—	—	0	0	—	—	.6	14	552
22...	2100	—	16100	70	6.9	11	4	380	50	.4	11	478
22...	2130	40	16000	—	—	3	2	—	—	.2	11	475
23...	1015	—	9590	62	6.7	17	0	560	40	.1	14	363
23...	1045	40	9340	—	—	3	0	—	—	.1	12	303
APR												
10...	0830	—	18200	—	—	1	0	—	—	.1	25	1230
10...	0900	40	18300	—	—	8	0	440	30	.2	22	1090
10...	2030	—	22800	—	—	10	5	760	50	.4	43	2650
10...	2045	40	23000	—	—	14	0	—	—	.1	40	2480
11...	0845	—	22000	—	—	38	1	740	60	.1	26	1540
11...	0900	40	21900	—	—	21	3	—	—	.2	19	1120
MAY												
29...	0945	—	2670	—	—	10	5	—	—	.1	3	22
29...	1015	40	2620	—	—	6	3	—	—	.2	4	28
JUN												
16...	1400	40	3780	—	—	4	2	—	—	.1	4	41
16...	1445	—	3750	—	—	3	0	—	—	.1	6	61
30...c/	1130	40	2650	—	—	6	5	—	—	—	3	21
30...c/	1215	—	2650	—	—	5	3	—	—	—	2	14
JUL												
02...	0830	—	2860	—	—	2	0	—	—	.1	2	15
02...	0915	40	2940	—	—	4	4	—	—	.2	2	16
06...	1545	—	1160	—	—	2	1	—	—	.2	2	6.3
06...	1615	40	1160	—	—	2	2	—	—	.3	1	3.1
21...	0630	—	2500	—	—	3	3	—	—	.2	7	47
21...	0700	40	2500	—	—	5	5	—	—	.2	7	47
24...	1330	40	2910	—	—	2	2	—	—	.2	5	39
24...	1430	—	2890	—	—	0	0	—	—	.2	3	23
28...	1230	40	2400	—	—	0	0	—	—	.1	4	26
28...	1315	—	2470	—	—	2	2	—	—	.1	3	20
31...	0930	—	3130	—	—	5	4	—	—	—	4	34
31...	1015	40	3190	—	—	6	6	—	—	—	5	43

a/ Also includes 0 µg/L lead, total recoverable; 0.00 µg/L aldrin, total and 0.00 µg/L PCN's, total.

b/ Also includes 0.00 µg/L aldrin, total and 0.00 µg/L PCN's, total.

c/ Also includes 0.4 µg/L PCB, dissolved.

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE SOURCE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
AUG												
04...	1115	40	2800	--	--	5	2	--	--	.2	3	23
04...	1200	--	3020	--	--	6	4	--	--	.0	4	33
06...	1345	40	2780	--	--	6	4	--	--	.1	4	30
06...	1430	--	2780	--	--	4	4	--	--	.0	2	15
10...	1000	--	1400	--	--	2	2	--	--	.1	2	7.6
10...	1030	40	1320	--	--	3	3	--	--	.2	1	3.6
18...	1215	40	2830	--	--	0	0	--	--	.2	3	23
18...	1300	--	2890	--	--	0	0	--	--	.1	3	23
25...	1245	40	2700	--	--	2	2	--	--	.1	3	22
25...	1315	--	2700	--	--	4	3	--	--	.1	4	29
27...	1105	40	2420	--	--	1	0	--	--	.1	5	33
27...	1150	--	2520	--	--	0	0	--	--	.0	2	14
SEP												
01...	1030	40	1060	--	--	0	0	--	--	.2	2	5.7
01...	1100	--	1100	--	--	0	0	--	--	.2	6	18
04...	0715	--	2670	--	--	4	0	--	--	.3	2	14
04...	0745	40	2670	--	--	0	0	--	--	.1	3	22
21...	0830	40	1210	--	--	6	5	--	--	.2	1	3.3
21...	0900	--	1210	--	--	6	6	--	--	.7	3	9.8
27...	1415	--	2940	--	--	--	--	--	--	.2	3	24
27...	1430	40	2880	--	--	--	--	--	--	--	2	16
28...	1200	40	1180	--	--	--	--	--	--	.7	5	16
28...	1205	40	--	--	--	--	--	--	--	.1	--	--
28...	1210	--	1180	--	--	--	--	--	--	.2	3	9.6
28...	1215	--	--	--	--	--	--	--	--	.1	--	--

01328000 BOND CREEK AT DUNHAM BASIN, NY

LOCATION.--Lat 43°18'22", long 73°32'56", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 800 ft (244 m) upstream from bridge on State Highway 196, 0.2 mi (0.3 km) upstream from Glens Falls feeder and abandoned Champlain Canal, 0.5 mi (0.8 km) upstream from Champlain (Barge) Canal, and 1.9 mi (3.1 km) east of courthouse at Hudson Falls.

DRAINAGE AREA.--14.7 mi^2 (38.1 km^2).

PERIOD OF RECORD.--June 1943 to current year. Prior to October 1950, published as "Bond Brook at Dunham Basin."

GAGE.--Water-stage recorder. Datum of gage is 140.30 ft (42.763 m) Barge Canal datum.

REMARKS.--Records fair except those for winter periods, which are poor. During canal navigation season, an indeterminate portion of flow is diverted at a point 0.5 mi (0.8 km) below gage into Lake Champlain basin through summit level of Champlain (Barge) Canal at Dunham Basin.

AVERAGE DISCHARGE.--33 years, 17.9 ft^3/s (0.507 m^3/s), 16.54 in/yr (420 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft^3/s (38.8 m^3/s) Dec. 31, 1948, gage height, 8.52 ft (2.597 m); maximum gage height, 8.66 ft (2.640 m) Mar. 5, 1964 (backwater from ice); minimum discharge, 0.10 ft^3/s (0.003 m^3/s) Aug. 1, 2, 1965, Aug. 25, Sept. 19, 20, 1968, Sept. 12, 13, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s (11 m^3/s):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 18	0915	564	16.0	5.57	1.698

Minimum discharge, 0.92 ft^3/s (0.026 m^3/s) Aug. 19, 27, 28, 29, 30, gage height, 1.51 ft (0.460 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.3	15	6.0	4.8	1.5	26	16	3.6	3.9	1.2	2.1
2	2.6	3.6	12	5.2	4.7	1.5	24	14	4.5	2.9	1.2	2.1
3	5.5	44	10	4.6	4.6	2.0	24	11	6.8	2.2	1.2	1.9
4	12	33	8.1	4.3	4.6	3.0	55	8.6	12	2.2	1.2	1.2
5	8.6	16	7.6	4.1	4.5	4.5	67	6.8	8.6	2.3	1.1	1.4
6	50	12	7.6	4.0	4.4	15	33	7.2	8.1	2.3	1.4	1.1
7	19	10	8.1	3.9	4.4	50	25	11	10	1.7	1.5	1.1
8	11	9.5	7.2	3.8	4.4	80	23	10	13	1.9	1.7	1.1
9	9.5	8.6	5.8	3.8	4.4	160	25	8.1	9.5	2.1	1.4	1.1
10	8.6	29	5.2	3.8	4.2	100	50	6.3	8.6	1.9	1.4	1.1
11	6.8	23	5.4	5.6	4.1	70	39	5.9	8.0	1.7	1.4	1.0
12	12	14	5.5	30	4.1	40	27	5.5	7.6	1.5	1.7	1.0
13	30	11	5.9	15	4.0	25	29	5.2	7.0	1.5	1.5	1.0
14	16	11	5.2	7.4	4.0	17	23	5.5	6.6	1.4	1.4	1.2
15	10	12	4.7	25	4.0	12	70	4.9	6.0	1.4	1.5	1.6
16	8.6	9.5	4.3	17	4.0	9.0	42	4.5	8.0	1.5	1.4	1.5
17	7.6	7.6	3.9	12	4.0	30	27	4.2	6.8	1.7	1.2	1.3
18	5.9	7.2	3.6	11	4.5	397	21	4.5	6.6	1.5	1.2	2.3
19	5.5	6.3	3.5	10	5.2	78	18	7.6	5.6	1.5	1.2	2.0
20	5.1	5.9	3.5	9.0	6.0	57	15	5.9	6.3	1.4	1.5	1.5
21	4.7	5.5	3.6	7.8	5.0	54	13	4.5	6.8	1.7	1.2	1.4
22	4.0	5.5	3.8	6.8	3.9	62	11	3.9	5.4	2.6	1.2	1.4
23	4.0	5.5	3.6	6.0	2.9	41	9.5	3.6	4.0	2.4	1.2	1.7
24	5.1	5.1	5.1	5.6	2.3	30	8.6	3.1	3.2	1.7	1.1	1.5
25	5.5	13	60	5.4	2.1	65	8.1	2.8	2.6	1.5	1.9	1.7
26	5.1	65	42	5.2	2.0	50	8.6	2.6	2.1	1.4	2.4	6.3
27	4.3	133	19	5.2	1.8	31	7.6	2.4	1.8	1.4	1.5	5.5
28	4.0	41	13	5.0	1.6	26	10	2.4	1.5	1.4	.92	3.3
29	4.0	29	11	4.9	1.5	37	32	2.4	2.5	1.4	.92	1.9
30	3.6	20	8.6	4.9	---	69	26	2.6	6.0	1.4	1.2	1.7
31	3.6	---	7.4	4.8	---	36	---	3.3	---	1.4	2.4	---
TOTAL	284.8	599.1	309.2	247.1	112.0	1653.5	797.4	186.3	189.1	56.8	43.24	55.0
MEAN	9.19	20.0	9.97	7.97	3.86	53.3	26.6	6.01	6.30	1.83	1.39	1.83
MAX	50	133	60	30	6.0	397	70	16	13	3.9	2.4	6.3
MIN	2.6	3.3	3.5	3.8	1.5	1.5	7.6	2.4	1.5	1.4	.92	1.0
CFSM	.63	1.36	.68	.54	.26	3.63	1.81	.41	.43	.12	.10	.12
IN.	.72	1.52	.78	.63	.28	4.18	2.02	.47	.48	.14	.11	.14

CAL YR 1979 TOTAL 9719.00 MEAN 26.6 MAX 560 MIN 1.0 CFSM 1.81 IN 24.59
WTR YR 1980 TOTAL 4533.54 MEAN 12.4 MAX 397 MIN .92 CFSM .84 IN 11.47

01329000 BATTEN KILL AT ARLINGTON, VT

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, Hydrologic Unit 02020003, on left bank 5 ft (1.5 m) upstream from bridge on Highway 313 at Arlington and 0.9 mi (1.4 km) downstream from Warm Brook.

DRAINAGE AREA.--152 mi^2 (394 km^2).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).

GAGE.--Water-stage recorder. Datum of gage is 596.68 ft (181.868 m), National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.

REMARKS.--Records good except those for winter period, which are fair. No gage-height record Dec. 23 to Jan. 22. Prior to 1949, diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--52 years, 340 ft^3/s (9.629 m^3/s), 30.38 in/yr (772 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft^3/s (314 m^3/s) Mar. 18, 1936, gage height, 11.3 ft (3.44 m), from floodmarks, present site, from rating curve extended above 6,100 ft^3/s (170 m^3/s) on basis of slope-area measurement at gage height 10.8 ft (3.29 m) and computation of peak flow over dam; minimum, 37 ft^3/s (1.05 m^3/s) Sept. 25, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft^3/s (62 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	1000	2310	65.4	7.87	2.399	Apr. 10	2130	*2380	67.4	7.93	2.417

Minimum discharge, 53 ft^3/s (1.50 m^3/s) Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	148	303	170	96	76	582	376	113	159	80	151
2	376	153	292	170	93	76	555	343	126	121	380	119
3	281	668	252	160	90	76	518	319	170	117	161	128
4	638	570	244	130	88	76	710	296	388	98	128	126
5	388	347	237	140	86	81	940	270	331	88	136	100
6	614	277	235	120	84	123	662	259	224	164	464	88
7	460	252	330	125	82	109	613	355	270	126	234	77
8	319	248	279	135	80	250	682	435	331	115	148	70
9	343	231	216	125	79	470	760	351	372	208	117	66
10	395	624	214	115	78	272	2110	292	277	136	102	64
11	300	629	210	130	78	246	1970	255	224	104	92	61
12	300	403	213	260	77	173	1210	252	193	104	100	58
13	500	323	254	160	77	133	1130	238	167	94	102	57
14	376	300	224	165	78	132	954	281	148	81	96	69
15	285	281	194	160	78	123	900	259	138	74	115	106
16	248	259	195	140	78	111	866	231	359	74	115	108
17	234	234	314	130	78	134	619	221	221	86	98	88
18	221	228	210	130	78	1570	527	238	161	92	86	288
19	202	224	150	130	78	1470	464	292	138	76	81	228
20	190	215	155	125	78	723	460	248	128	70	84	141
21	187	208	160	110	78	773	473	218	126	81	86	108
22	178	200	181	100	77	2140	443	208	117	100	83	94
23	170	195	190	131	78	1280	391	190	106	88	79	88
24	202	189	210	115	77	782	376	175	98	79	74	81
25	221	247	500	100	77	663	376	164	92	70	70	74
26	187	538	410	115	77	543	363	148	86	66	67	220
27	175	1600	300	117	76	463	347	141	81	64	63	198
28	172	848	240	111	77	435	359	133	79	64	61	126
29	167	470	220	110	77	500	423	128	83	61	61	103
30	167	360	210	105	---	904	435	124	190	67	61	92
31	153	---	190	100	---	782	---	119	---	60	124	---
TOTAL	8824	11469	7532	4134	2328	15689	21218	7559	5537	2987	3748	3377
MEAN	285	382	243	133	80.3	506	707	244	185	96.4	121	113
MAX	638	1600	500	260	96	2140	2110	435	388	208	464	288
MIN	153	148	150	100	76	76	347	119	79	60	61	57
CFSM	1.88	2.51	1.60	.88	.53	3.33	4.65	1.61	1.22	.63	.80	.74
IN.	2.16	2.81	1.84	1.01	.57	3.84	5.19	1.85	1.36	.73	.92	.83

CAL YR 1979 TOTAL 143238 MEAN 392 MAX 2300 MIN 66 CFSM 2.58 IN 35.06
WTR YR 1980 TOTAL 94402 MEAN 258 MAX 2140 MIN 57 CFSM 1.70 IN 23.10

01329650 HUDSON RIVER AT SCHUYLERVILLE, NY

LOCATION.--Lat 43°05'54", long 73°34'25", at Saratoga-Washington County line, Hydrologic Unit 02020003, at bridge on State Highway 29, 0.2 mi (0.3 km) east of Schuylerville, 0.8 mi (1.3 km) downstream from Batten Kill, and 1.0 mi (1.6 km) downstream from Champlain (Barge) Canal lock 5.

DRAINAGE AREA.--3,440 mi^2 (8,910 km^2) approximately.

PERIOD OF RECORD.--Water years 1977 to current year.
CHEMICAL DATA: 1980 (b).
MINOR ELEMENTS DATA: 1977 (e), 1978-79 (d), 1980 (b).
PESTICIDE DATA: 1977 (e), 1978-79 (d).
ORGANIC DATA: PCB--1977 (e), 1978-80 (d).
PCN--1977 (e), 1978-79 (d).
NUTRIENT DATA: 1977 (e), 1978 (d).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1977 to September 1979.

REMARKS.--Water discharge estimated from wire-weight gage located at bridge. Streamflow affected by regulation for power generation and diversion for canal operations.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
NOV											
27...	1100	11000	—	—	25	4	1100	40	.1	26	772
28...	1015	19300	—	—	0	0	1200	80	.1	33	1720
MAR											
22...	0915	10900	—	—	7	0	600	50	.1	15	441
22...	1415	14400	106	7.0	89	12	—	—	.3	90	3500
22...	2015	16500	83	6.9	99	13	1900	110	.4	69	3070
23...	0945	14000	80	7.0	16	0	730	70	.1	19	718
APR											
10...	1000	15800	—	—	9	0	—	—	.1	23	981
11...	0315	23200	—	—	29	0	—	—	.4	60	3760
11...	1000	23200	—	—	31	8	—	—	.2	40	2510
MAY											
29...	1130	1720	—	—	7	5	—	—	.2	3	14
JUL											
06...	1700	769	—	—	4	4	—	—	.6	4	8.3
AUG											
10...	1800	1100	—	—	4	4	—	—	.3	0	.00
SEP											
01...	1145	200	—	—	0	0	—	—	.4	1	.54
04...	0830	3100	—	—	0	0	—	—	.2	1	8.4

01330500 KAYADEROSSERAS CREEK NEAR WEST MILTON, NY

LOCATION.--Lat 43°02'18", long 73°54'35", Saratoga County, Hydrologic Unit 02020003, on left bank 600 ft (183 m) downstream from Glowegee Creek, 1.0 mi (1.6 km) east of West Milton, and 3.5 mi (5.6 km) northwest of Ballston Spa.

DRAINAGE AREA.--90.1 mi^2 (233.4 km^2).

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 741: Drainage area. WSP 1202: 1935-40.

GAGE.--Water-stage recorder. Datum of gage is 376.06 ft (114.623 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter periods, which are poor. Slight occasional diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--53 years, 136 ft^3/s (3.852 m^3/s), 20.52 in/yr (521 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,710 ft^3/s (133 m^3/s) Mar. 18, 1936, gage height, 10.78 ft (3.286 m), from floodmarks; maximum gage height, 11.20 ft (3.414 m) Mar. 14, 1977, from floodmarks; minimum discharge, 6.1 ft^3/s (0.17 m^3/s) Aug. 23, 1927, gage height, 0.86 ft (0.262 m); minimum daily, 12 ft^3/s (0.34 m^3/s) Aug. 5-9, Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft^3/s (34 m^3/s):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0200	2,640	74.8	7.77	2.368

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Aug. 29, gage height, 1.11 ft (0.338 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	51	97	70	42	30	319	195	52	57	25	26
2	53	60	90	64	38	28	287	172	63	47	50	30
3	80	264	76	60	35	28	251	146	79	48	39	61
4	168	189	70	56	33	28	369	124	92	39	32	32
5	95	122	75	52	32	30	473	111	66	35	27	31
6	202	99	75	49	31	45	305	106	54	46	25	68
7	122	89	78	45	31	100	248	113	97	36	24	37
8	86	85	72	44	31	200	229	110	115	41	20	28
9	78	78	64	42	30	400	232	99	82	68	18	22
10	84	102	60	40	30	250	339	93	69	48	17	21
11	71	106	66	48	30	170	324	89	61	38	18	19
12	75	89	72	171	30	120	247	91	56	43	25	17
13	117	80	74	137	30	96	257	90	50	38	24	17
14	95	77	66	116	30	80	231	109	46	32	22	21
15	79	73	60	296	30	68	335	99	43	28	51	27
16	73	74	56	157	31	60	274	88	78	26	33	25
17	68	72	52	109	32	52	209	77	58	30	26	22
18	65	70	50	95	34	100	180	111	47	36	24	39
19	65	68	49	88	36	250	162	196	41	27	22	34
20	60	66	48	84	40	300	151	135	52	26	21	26
21	58	63	54	80	42	563	142	102	68	27	22	23
22	57	61	60	78	42	1870	129	89	50	35	21	24
23	56	61	66	74	40	710	124	77	41	40	20	23
24	61	61	80	70	38	469	117	69	37	30	18	24
25	65	79	231	110	36	582	116	63	33	26	18	23
26	60	142	236	90	35	433	115	56	31	24	17	155
27	55	357	148	70	34	322	110	53	30	21	16	85
28	54	197	109	60	32	309	129	49	28	21	18	51
29	54	137	93	54	31	416	342	47	35	23	17	38
30	54	112	80	50	---	700	280	47	71	33	16	32
31	52	---	74	45	---	445	---	46	---	28	30	---
TOTAL	2415	3184	2581	2604	986	9254	7026	3052	1725	1097	756	1081
MEAN	77.9	106	83.3	84.0	34.0	299	234	98.5	57.5	35.4	24.4	36.0
MAX	202	357	236	296	42	1870	473	196	115	68	51	155
MIN	52	51	48	40	30	28	110	46	28	21	16	17
CFSM	.87	1.18	.93	.93	.38	3.32	2.60	1.09	.64	.39	.27	.40
IN.	1.00	1.31	1.07	1.08	.41	3.82	2.90	1.26	.71	.45	.31	.45

CAL YR 1979 TOTAL 59741 MEAN 164 MAX 1400 MIN 28 CFSM 1.82 IN 24.67
WTR YR 1980 TOTAL 35761 MEAN 97.7 MAX 1870 MIN 16 CFSM 1.08 IN 14.76

01331095 HUDSON RIVER AT STILLWATER, NY

LOCATION.--Lat 42°56'16", long 73°39'04" at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on State Highway 67 in Stillwater, 0.4 mi (0.6 km) upstream from Champlain (Barge) Canal lock 4, and 0.9 mi (1.4 km) upstream from Hoosic River.

DRAINAGE AREA.--3,773 mi^2 (9,772 km^2).

PERIOD OF RECORD.--Water years 1969 to 1975, 1977 to current year.
CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c), 1980 (b).
MINOR ELEMENTS DATA: 1972 (b), 1973-75 (a), 1977-79 (e), 1980 (c).
PESTICIDE DATA: 1977-79 (e), 1980 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
PCB--1977-80 (e).
PCN--1977-79 (e), 1980 (a).
NUTRIENT DATA: 1969 (c), 1970-74 (d), 1975 (c), 1977-78 (e).
SEDIMENT DATA: 1977 (d), 1978 (a).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1977.to current year.

REMARKS.--Water-stage recorder installed Jan. 8, 1978. Water-discharge records are good above 3,000 ft^3/s and fair below 3,000 ft^3/s. Streamflow affected by regulation for power generation and diversion for canal operations. No sediment data Jan. 30 to Feb. 29 due to ice cover.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 189 mg/L Jan. 4, 1979; minimum daily mean, 1 mg/L on many days each year.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 10,600 tons (9,620 Mg) Apr. 29, 1979; minimum daily 6.6 (6.0 Mg) Sept. 2, 1980.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean 85 mg/L Apr. 11; minimum daily mean, 1 mg/L on many days during December, April and August.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 5,990 tons (5,430 Mg) Apr. 11; minimum daily, 6.6 tons (6.0 Mg) Sept. 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	PCB, DIS-SOLVED (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)
OCT												
31...	1100	5480	--	--	10	5	310	20	.3	--	.00	.00
NOV												
27...	1145	11300	--	--	14	0	800	50	.2	--	--	--
28...	0930	22600	--	--	63	4	2100	150	.7	--	--	--
DEC												
27...	1100	9010	--	--	13	0	--	--	.0	--	--	--
MAR												
03...	1000	1260	--	--	120	11	--	--	.1	--	--	--
10...	0845	3850	--	--	22	7	--	--	.1	--	--	--
22...	1130	13400	137	7.0	10	3	1100	80	--	--	--	--
22...	1500	15200	131	7.1	43	21	1200	90	--	--	--	--
22...	2115	18600	126	7.0	15	9	1700	80	.1	--	--	--
22...	2120	--	--	--	--	--	--	--	.1	--	--	--
23...	1130	15100	92	7.1	9	6	860	60	.1	--	--	--
APR												
10...	1045	17500	--	--	17	1	--	--	.1	--	--	--
11...	0345	26900	--	--	55	8	--	--	.5	--	--	--
11...	1100	27300	--	--	60	9	--	--	.6	--	--	--
MAY												
29...	1215	2160	--	--	24	12	--	--	.3	--	--	--
JUN												
16...	1145	3750	--	--	14	9	--	--	.3	--	--	--
30...	0830	1360	--	--	7	5	--	--	--	.3	--	--
JUL												
02...	1100	3520	--	--	6	3	--	--	.5	--	--	--
07...	0700	1510	--	--	5	4	--	--	.3	--	--	--
18...	1145	2370	--	--	8	6	--	--	.4	--	--	--
21...	0815	1470	--	--	6	6	--	--	.4	--	--	--
24...	1015	3660	--	--	3	2	--	--	.4	--	--	--
28...	1030	1540	--	--	2	2	--	--	.4	--	--	--
31...	1130	3520	--	--	7	4	--	--	--	--	--	--
AUG												
06...	1230	2790	--	--	6	6	--	--	.2	--	--	--
11...	0630	1400	--	--	4	4	--	--	.2	--	--	--
18...	1015	1430	--	--	0	0	--	--	.2	--	--	--
25...	1100	1360	--	--	2	2	--	--	.4	--	--	--
27...	1000	2660	--	--	2	0	--	--	.3	--	--	--
SEP												
02...	0800	659	--	--	0	0	--	--	.2	--	--	--
04...	0900	3060	--	--	0	0	--	--	.2	--	--	--
18...	1100	2880	--	--	2	2	--	--	.5	--	--	--
22...	0745	1260	--	--	8	5	--	--	.3	--	--	--

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	2370	6	38	5210	5	70	11900	8	257
2	3520	4	38	5110	5	69	9470	11	281
3	3520	3	29	5910	4	64	7310	10	197
4	4090	5	55	6620	4	71	8550	6	139
5	4340	6	70	4950	6	80	8180	3	66
6	4690	40	507	6350	6	103	8480	7	160
7	7030	35	664	6620	5	89	8480	4	92
8	6820	7	129	6290	5	85	8180	3	66
9	6290	4	68	6180	4	67	6960	12	226
10	6620	4	71	6290	4	68	4790	9	116
11	5960	5	80	7240	8	156	6620	21	375
12	6290	5	85	5740	6	93	7240	13	254
13	6240	5	84	7310	5	99	7170	17	329
14	6020	6	98	7030	5	95	7380	9	179
15	4490	6	73	6750	3	55	7170	1	19
16	6020	5	81	6420	5	87	7100	1	19
17	6350	5	86	6180	5	83	6890	2	37
18	6070	5	82	5370	5	72	6620	1	18
19	6070	6	98	4190	3	34	5690	3	46
20	5910	6	96	5110	3	41	5420	3	44
21	5260	4	57	5530	4	60	5580	3	45
22	3850	3	31	5580	5	75	5690	4	61
23	5160	5	70	5370	7	101	5850	4	63
24	5640	5	76	5420	7	102	6070	12	197
25	5530	6	90	4950	11	147	6960	7	132
26	5530	5	75	4590	17	211	8930	6	145
27	5740	5	77	13900	37	1390	8850	6	143
28	5260	8	114	21300	51	2930	8180	6	133
29	3660	7	69	17400	8	376	8030	6	130
30	4590	4	50	13700	8	296	7740	3	63
31	5260	4	57	---	---	---	7380	4	80
TOTAL	164190	---	3298	218610	---	7269	228860	---	4112

DAY	MEAN DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	7030	14	266	3150			2880	9	70
2	6620	15	268	3010			1960	5	26
3	6420	12	208	2370			1650	4	18
4	6070	9	148	2120			2710	6	44
5	6020	6	98	3060			2920	6	47
6	7450	4	80	3100			3240	6	52
7	5580	23	347	3150			3150	5	43
8	5210	13	183	2970			4640	4	50
9	4790	5	65	3190			5530	8	119
10	4790	7	91	2790			4340	10	117
11	4740	9	115	2200			4440	5	60
12	5260	14	199	2790			4040	5	55
13	5110	14	193	3060			3660	4	40
14	4390	15	178	3010			3560	6	58
15	5910	12	191	3100			3060	15	124
16	6180	10	167	2970			2200	21	125
17	5640	9	137	2040			2490	22	148
18	5370	7	101	1330			9870	22	586
19	5210	8	113	2450			9320	21	528
20	4390	9	107	3010			6820	23	424
21	3520	8	76	3060			6240	37	623
22	4390	8	95	2970			13100	35	1240
23	3990	7	75	3100			15700	47	1990
24	3990	8	86	2790			11100	24	719
25	4040	18	196	2040			10400	11	309
26	3710	14	140	2580			10400	8	225
27	3060	8	66	2880			9160	29	717
28	2920	12	95	2880			8030	38	824
29	3850	11	114	2620			7880	43	915
30	3660	---	---	---			10900	25	736
31	3520	---	---	---			11100	16	480
TOTAL	152830	---	4198	79790			196490	---	11512

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	10100	15	409	7960	4	86	2040	4	22
2	9320	18	453	7310	3	59	2320	5	31
3	8930	18	434	6820	3	55	3610	6	58
4	9160	11	272	6130	4	66	4340	5	59
5	11200	9	272	5640	6	91	5480	5	74
6	10900	6	177	5260	5	71	5910	5	80
7	9710	6	157	5210	5	70	5690	7	108
8	8850	17	406	4900	6	79	5000	8	108
9	9010	20	487	4440	5	60	4440	7	84
10	18400	41	2040	4540	6	74	5210	11	155
11	26100	85	5990	4240	5	57	5740	10	155
12	19800	28	1500	4490	4	48	5850	10	158
13	15100	11	448	5530	26	388	5370	14	203
14	13500	8	292	5580	20	301	4950	17	227
15	13100	13	460	5370	8	116	3610	13	127
16	14800	13	519	5420	4	59	3800	8	82
17	13400	9	326	4900	4	53	4040	6	65
18	11000	6	178	4240	2	23	3610	6	58
19	9630	4	104	4390	3	36	3610	6	58
20	8480	4	92	5370	5	72	3380	4	37
21	7450	6	121	5480	5	74	3380	5	46
22	6750	5	91	5580	5	75	2320	6	38
23	6290	7	119	5050	4	55	2660	5	36
24	5740	7	108	5000	4	54	3710	6	60
25	5370	5	72	4240	14	160	3380	5	46
26	5210	3	42	3010	8	65	3330	4	36
27	5690	2	31	3470	5	47	3240	5	44
28	6130	1	17	4290	6	69	2970	4	32
29	6620	2	36	2490	5	34	2120	4	23
30	8480	2	46	2750	4	30	2080	3	17
31	---	---	---	2710	5	37	---	---	---
TOTAL	314220	---	15699	151810	---	2564	117190	---	2327

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	3150	4	34	2880	8	62	960	3	7.8
2	3420	5	46	2970	5	40	1220	2	6.6
3	3560	5	48	2370	3	19	3330	5	45
4	2240	5	30	1920	3	16	3150	3	26
5	2040	6	33	2880	2	16	3100	5	42
6	2040	6	33	3100	3	25	3150	5	43
7	2410	4	26	3420	2	18	2080	4	22
8	3060	5	41	3060	1	8.3	1400	9	34
9	3190	8	69	3100	4	33	3060	13	107
10	3420	10	92	2490	2	13	2840	10	77
11	3470	14	131	2280	2	12	2450	7	46
12	3520	15	143	3100	1	8.4	2620	10	71
13	2410	18	117	3190	3	26	3100	12	100
14	1840	10	50	2840	1	7.7	2120	13	74
15	3420	4	37	2970	1	8.0	1400	13	49
16	3010	5	41	3010	1	8.1	3520	13	124
17	3290	4	36	2000	2	11	3010	11	89
18	3010	6	49	1730	3	14	2840	6	46
19	2710	18	132	2880	1	7.8	2880	6	47
20	2040	20	110	2880	1	7.8	2700	9	66
21	1840	14	70	2880	1	7.8	2100	11	62
22	2970	21	168	2880	1	7.8	1500	9	36
23	2920	12	95	2750	2	15	2790	7	53
24	3420	5	46	1840	4	20	2660	8	57
25	3010	4	33	1540	3	12	2970	10	80
26	2660	4	29	2620	4	28	2920	13	102
27	2040	4	22	2660	3	22	3420	12	111
28	1840	4	20	2660	5	36	2320	7	44
29	2840	5	38	2660	6	43	2710	7	51
30	3290	5	44	2660	5	36	3420	15	139
31	3470	4	37	1810	2	9.8	---	---	---
TOTAL	87550	---	1900	82030	---	598.5	77740	---	1857.4

01332500 HOOSIC RIVER NEAR WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'01", long 73°09'34", Berkshire County, Hydrologic Unit 02020003, on left bank 0.3 mi (0.5 km) downstream from Sherman Brook and 2.7 mi (4.3 km) east of junction of U.S. Highway 7 and State Highway 2 in Williamstown.

DRAINAGE AREA.--126 mi² (326 km²). Area at site used prior to June 6, 1979, 132 mi² (342 km²).

PERIOD OF RECORD.--Discharge: July 1940 to current year.
Water-quality records: Water years 1953-54, 1957-58, 1967-69.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 616.11 ft (187.790 m), Corps of Engineers datum. Prior to June 6, 1979, at site 1.2 mi (1.9 km) downstream at different datum.

REMARKS.--Records good. Prior to 1966, slight diurnal fluctuation at low flow caused by mills upstream. Some regulation by Cheshire Reservoir 16 mi (26 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--40 years, 275 ft³/s (7.788 m³/s), 29.64 in/yr (753 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 31, 1948, gage height, 14.85 ft (4.526 m), former site and datum, from rating curve extended above 4,300 ft³/s (120 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 5.8 ft³/s (0.16 m³/s) Aug. 30, 31, Oct. 26, 1940; minimum daily, 24 ft³/s (0.68 m³/s) Sept. 9, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 3	2045	2410	68.3	8.18	2.493	Mar. 22	0045	a*6400	181	10.87	3.313
Nov. 27	0100	2430	68.8	8.20	2.499	Apr. 10	0630	4630	131	9.79	2.984

a From rating curve extended above 2,700 ft³/s (76 m³/s) on basis of dam computation by index-measurement method.

Minimum discharge, 21 ft³/s (0.59 m³/s) Sept. 9, 10; minimum daily, 24 ft³/s (0.68 m³/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	448	145	242	172	100	66	561	320	87	295	55	26
2	901	150	220	172	95	66	556	280	109	180	56	34
3	852	477	195	163	90	66	531	248	134	158	65	74
4	1130	358	180	125	84	67	900	219	141	119	62	47
5	583	247	175	137	78	67	851	195	121	115	55	41
6	787	216	170	106	74	85	602	196	97	141	55	40
7	548	203	222	117	73	81	608	267	129	100	53	27
8	435	201	193	125	73	443	579	294	134	104	52	27
9	514	188	170	114	73	350	801	236	120	133	49	24
10	487	298	155	106	73	186	3070	209	130	93	40	26
11	416	308	145	117	72	312	1200	191	117	84	51	25
12	454	263	150	317	73	160	793	195	104	102	69	25
13	514	238	150	163	73	105	733	281	92	74	59	25
14	379	240	141	163	73	101	614	303	87	66	54	28
15	323	238	133	167	73	95	827	236	99	61	63	25
16	277	232	133	154	75	90	638	208	339	61	57	26
17	244	207	305	141	73	129	512	185	149	106	45	28
18	209	208	185	141	72	1310	444	202	114	68	40	70
19	190	194	141	141	72	517	393	262	102	58	47	47
20	185	180	163	137	72	427	353	211	96	57	48	34
21	185	170	141	117	76	1360	349	186	95	74	41	33
22	190	165	146	125	76	3200	309	182	89	66	45	36
23	185	160	150	137	76	984	278	163	84	143	40	29
24	204	155	181	114	75	751	261	142	75	92	39	26
25	181	180	686	117	73	798	244	130	69	74	38	26
26	158	511	528	125	69	580	239	114	67	61	38	46
27	154	1340	341	120	67	434	221	109	67	56	39	44
28	154	536	271	115	66	483	253	112	64	57	37	34
29	158	346	250	110	66	727	496	95	171	56	36	30
30	150	277	234	103	---	1070	413	100	747	62	36	32
31	145	---	195	110	---	774	---	91	---	55	30	---
TOTAL	11740	8631	6691	4271	2185	15884	18629	6162	4029	2971	1494	1035
MEAN	379	288	216	138	75.3	512	621	199	134	95.8	48.2	34.5
MAX	1130	1340	686	317	100	3200	3070	320	747	295	69	74
MIN	145	145	133	103	66	66	221	91	64	55	30	24
CFSM	2.87	2.18	1.64	1.05	.57	3.88	4.71	1.51	1.02	.73	.37	.26
IN.	3.31	2.43	1.89	1.20	.62	4.48	5.25	1.74	1.14	.84	.42	.29

CAL YR 1979 TOTAL 131305 MEAN 360 MAX 3340 MIN 41 CFSM 2.73 IN 37.00
WTR YR 1980 TOTAL 83722 MEAN 229 MAX 3200 MIN 24 CFSM 1.74 IN 23.59

01333000 GREEN RIVER AT WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'32", long 73°11'50", Berkshire County, Hydrologic Unit 02020003, on left bank 0.1 mi (0.2 km) upstream from bridge on State Highway 2 at Williamstown and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--42.6 mi^2 (110.3 km^2).

PERIOD OF RECORD.--Discharge: September 1949 to current year.
Water-quality records: Water years 1967-69.

GAGE.--Water-stage recorder. Altitude of gage is 615 ft (187 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Slight diurnal fluctuation at times caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--31 years, 83.9 ft^3/s (2.376 m^3/s), 26.75 in/yr (679 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,060 ft^3/s (115 m^3/s) Dec. 21, 1973, gage height, 5.68 ft (1.731 m) in gage well, from rating curve extended above 750 ft^3/s (21 m^3/s) on basis of slope-area measurement at gage height 4.94 ft (1.506 m); maximum gage height, 6.35 ft (1.935 m) Mar. 13, 1977, from floodmarks, gage height in well unknown; minimum discharge, 3.1 ft^3/s (0.088 m^3/s) Sept. 20, 22, 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of about 7.5 ft (2.3 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 850 ft^3/s (24 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2015	1460	41.3	4.09	1.247	Mar. 22	0115	a*2090	59.2	4.55	1.387
Mar. 18	0815	1030	29.2	3.71	1.131	Apr. 10	0545	a2050	58.1	4.52	1.378

a From rating curve extended as explained above.

Minimum discharge, 3.4 ft^3/s (0.096 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	35	125	67	19	11	181	73	23	48	8.5	5.0
2	195	38	113	64	19	10	169	69	25	35	9.5	5.5
3	282	148	98	58	17	9.7	154	64	28	30	9.6	7.9
4	260	95	90	52	16	10	236	59	30	25	9.1	5.6
5	180	79	84	51	15	12	229	55	27	24	8.1	4.8
6	239	73	79	50	14	24	178	53	22	28	7.9	5.1
7	156	70	97	47	15	25	160	64	29	20	7.4	4.4
8	131	66	76	43	16	215	153	65	26	23	6.9	4.3
9	143	62	68	39	15	90	273	56	25	24	7.0	4.1
10	124	98	67	36	14	58	1090	52	29	19	5.9	4.4
11	108	89	65	47	13	115	477	51	24	18	7.8	4.1
12	121	85	62	79	14	40	326	51	22	21	12	3.8
13	125	79	61	65	14	36	289	72	21	17	8.7	3.6
14	105	80	57	49	14	28	225	66	19	16	7.6	4.4
15	93	75	53	45	14	27	255	58	21	14	8.1	4.9
16	84	73	58	40	14	30	203	54	44	15	6.8	4.5
17	78	68	94	39	14	115	167	50	25	15	6.4	4.8
18	73	65	56	37	14	462	149	55	21	12	6.1	10
19	67	61	54	36	14	142	136	58	20	11	6.5	6.2
20	62	59	56	34	14	136	126	52	19	11	7.2	4.8
21	58	56	56	32	15	428	116	49	19	16	6.6	5.5
22	56	54	57	31	14	826	103	46	18	13	6.2	6.0
23	52	52	59	37	14	294	94	41	16	38	5.9	4.8
24	54	51	62	40	14	221	87	38	15	15	5.4	4.3
25	49	67	160	38	15	259	81	35	14	12	5.2	4.2
26	45	360	123	31	14	186	77	32	13	11	5.0	7.7
27	43	454	105	27	13	158	72	30	12	11	4.8	6.2
28	42	235	91	26	13	153	73	28	11	9.7	4.8	4.9
29	40	176	85	25	12	222	86	26	59	10	5.1	4.6
30	38	142	79	20	---	284	81	25	118	11	5.2	4.4
31	37	---	72	20	---	220	---	23	---	9.1	5.1	---
TOTAL	3345	3145	2462	1305	423	4846.7	6046	1550	795	581.8	216.4	154.8
MEAN	108	105	79.4	42.1	14.6	156	202	50.0	26.5	18.8	6.98	5.16
MAX	282	454	160	79	19	826	1090	73	118	48	12	10
MIN	37	35	53	20	12	9.7	72	23	11	9.1	4.8	3.6
CFSM	2.54	2.47	1.86	.99	.34	3.66	4.74	1.17	.62	.44	.16	.12
IN.	2.92	2.75	2.15	1.14	.37	4.23	5.28	1.35	.69	.51	.19	.14

CAL YR 1979 TOTAL 44044.3 MEAN 121 MAX 2240 MIN 4.4 CFSM 2.84 IN 38.46
WTR YR 1980 TOTAL 24870.7 MEAN 68.0 MAX 1090 MIN 3.6 CFSM 1.60 IN 21.72

01333500 LITTLE HOOSIC RIVER AT PETERSBURG, NY

LOCATION.--Lat 42°45'50", long 73°20'16", Rensaelar County, Hydrologic Unit 02020003, on left bank 100 ft (30 m) downstream from highway bridge on dirt road, 1.0 mi (1.6 km) downstream from Petersburg, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--56.1 mi² (145 km²).

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WSP 1702: 1959.

GAGE.--Water-stage recorder. Datum of gage is 587.40 ft (179.039 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--29 years, 94.9 ft³/s (2.688 m³/s), 22.98 in/yr (584 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s (142 m³/s) June 30, 1973, gage height, 9.20 ft (2.804 m); minimum, 1.9 ft³/s (0.054 m³/s) Sept. 11, 12, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of 9.4 ft (2.87 m), from floodmarks, discharge, 7,470 ft³/s (212 m³/s), on basis of contracted-opening measurements of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 1,120 ft³/s (31.7 m³/s) Mar. 22, gage height 5.30 ft (1.615 m); minimum 5.1 ft³/s (0.16 m³/s) Sept. 12, 13, gage height 1.91 ft (0.582 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	33	140	81	16	13	206	69	18	70	9.8	6.2
2	250	35	125	76	15	17	192	64	21	43	12	8.0
3	322	192	110	67	15	23	176	60	31	35	11	9.8
4	351	131	102	62	14	31	242	56	36	27	9.8	6.7
5	251	111	95	56	14	40	254	52	25	25	9.2	6.2
6	429	103	91	50	14	70	205	49	20	40	9.2	6.4
7	253	98	106	70	14	110	182	54	23	24	8.9	6.0
8	194	93	89	90	14	200	168	53	24	25	8.3	5.8
9	198	87	79	110	14	80	193	48	21	27	8.0	5.4
10	162	127	76	156	15	50	493	44	22	21	7.4	5.6
11	139	120	73	119	16	40	346	43	20	19	8.3	5.3
12	145	107	71	79	17	34	267	44	18	21	9.8	5.1
13	144	102	70	63	18	32	253	63	17	18	8.3	5.1
14	123	113	65	51	19	29	211	60	15	16	8.0	5.6
15	111	108	59	44	20	28	222	52	15	15	8.3	5.6
16	101	100	64	39	21	35	195	47	43	15	7.4	5.3
17	93	94	70	37	22	80	170	43	24	31	7.4	5.7
18	87	89	80	35	23	501	152	46	19	18	6.9	13
19	80	85	100	33	24	203	136	50	17	15	6.9	6.9
20	74	81	160	31	25	187	125	45	16	14	8.9	6.1
21	68	76	258	29	23	356	118	41	16	16	7.4	5.9
22	62	72	105	28	21	651	106	39	15	15	7.2	6.1
23	58	68	71	26	19	342	98	35	14	45	6.9	5.7
24	56	66	77	25	17	272	91	31	13	23	6.4	5.3
25	52	91	144	23	16	307	85	29	12	17	6.2	5.3
26	47	195	121	22	15	231	80	26	12	14	6.2	7.4
27	44	357	108	21	14	198	76	24	11	12	6.2	6.2
28	42	241	101	20	13	184	74	22	11	11	6.2	5.7
29	41	194	98	19	13	246	81	21	35	11	6.2	5.5
30	38	162	94	18	---	304	76	20	117	11	6.2	5.2
31	35	---	85	17	---	244	---	19	---	10	6.4	---
TOTAL	4246	3531	3087	1597	501	5138	5273	1349	701	704	245.3	188.1
MEAN	137	118	99.6	51.5	17.3	166	176	43.5	23.4	22.7	7.91	6.27
MAX	429	357	258	156	25	651	493	69	117	70	12	13
MIN	35	33	59	17	13	13	74	19	11	10	6.2	5.1
CFSM	2.44	2.10	1.78	.92	.31	2.96	3.14	.78	.42	.41	.14	.11
IN.	2.82	2.34	2.05	1.06	.33	3.41	3.50	.89	.46	.47	.16	.12

CAL YR 1979 TOTAL 42661.7 MEAN 117 MAX 1930 MIN 6.4 CFSM 2.09 IN 28.29
WTR YR 1980 TOTAL 26560.4 MEAN 72.6 MAX 651 MIN 5.1 CFSM 1.29 IN 17.61

01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT

LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, Hydrologic Unit 02020003, on left bank 0.6 mi (1.0 km) downstream from Paran Creek and 1.4 mi (2.3 km) south of North Bennington.

DRAINAGE AREA.--111 mi^2 (287 km^2).

PERIOD OF RECORD.--Discharge: June 1931 to current year.
Water-quality records: Water years 1953-54.

REVISED RECORDS.--WSP 781: 1933(M).

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map.

REMARKS.--Records good except those for winter period and periods of no gage-height record, Oct. 4-22, Mar. 22, Apr. 1-17, which are fair. Occasional diurnal fluctuation at low flow caused by mills upstream; diurnal fluctuation greater prior to 1960. Diversion upstream for municipal supply of Bennington and North Bennington since 1961. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--49 years, 222 ft^3/s (6.287 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,450 ft^3/s (239 m^3/s) Sept. 21, 1938, gage height, 12.04 ft (3.670 m), from rating curve extended above 2,800 ft^3/s (79 m^3/s) on basis of contracted-opening measurements at gage heights 10.13 ft (3.088 m), 10.49 ft (3.197 m), 11.50 ft (3.505 m), and 12.04 ft (3.670 m) and slope-area measurement and computation of flow over dam at gage height 12.04 ft (3.670 m); minimum, 4 ft^3/s (0.1 m^3/s) Sept. 27, 1932; minimum daily, 21 ft^3/s (0.59 m^3/s) Sept. 22, 23, 1964, July 12, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Nov. 27	0130	2800	79.3	6.65	2.027	Apr. 10	--	*4020	114	a8.06	2.457
Mar. 22	--	3900	110	--	--						

a From peak-stage indicator.

Minimum discharge, 38 ft^3/s (1.08 m^3/s) Feb. 27; minimum daily, 46 ft^3/s (1.30 m^3/s) Mar. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	105	251	124	64	49	360	203	74	173	138	90
2	780	107	226	124	62	48	340	189	69	112	340	155
3	373	577	196	115	60	46	340	173	92	102	138	296
4	1000	382	186	90	59	46	500	158	110	81	122	120
5	450	247	179	97	58	49	680	146	83	77	88	96
6	650	206	175	76	57	66	420	155	70	146	108	90
7	500	194	218	88	56	65	400	233	102	90	92	77
8	320	212	188	96	55	404	450	226	110	106	76	69
9	340	186	154	87	54	404	550	186	98	164	72	62
10	400	311	150	78	53	184	2100	167	102	96	64	59
11	280	355	146	90	52	184	1200	158	86	81	69	56
12	250	253	149	180	51	115	800	164	85	77	112	54
13	380	218	164	115	51	91	660	167	74	70	86	53
14	300	220	146	118	50	82	580	189	67	62	79	64
15	230	210	132	114	50	77	520	164	74	59	240	83
16	200	191	136	101	52	70	500	143	304	56	110	65
17	180	174	240	93	54	130	400	130	130	85	90	60
18	165	170	155	93	55	787	356	146	96	79	77	312
19	150	162	120	93	55	418	320	186	83	60	70	130
20	140	148	120	91	55	280	308	155	79	56	72	92
21	130	140	115	76	54	629	300	135	85	56	69	79
22	125	128	134	71	53	1950	270	127	79	59	65	79
23	124	135	139	86	54	697	240	115	70	102	62	74
24	153	136	162	66	54	450	223	106	64	77	57	65
25	149	204	356	72	54	377	213	98	60	60	54	62
26	130	494	310	75	52	328	206	94	56	54	53	104
27	121	1390	211	74	50	281	199	92	56	53	50	88
28	117	518	173	69	49	300	199	83	54	48	50	77
29	119	362	161	68	49	415	244	79	86	48	50	69
30	115	292	156	66	---	681	233	76	316	51	50	64
31	109	---	135	66	---	490	---	70	---	47	96	---
TOTAL	8663	8427	5483	2852	1572	10193	14111	4513	2914	2487	2899	2844
MEAN	279	281	177	92.0	54.2	329	470	146	97.1	80.2	93.5	94.8
MAX	1000	1390	356	180	64	1950	2100	233	316	173	340	312
MIN	109	105	115	66	49	46	199	70	54	47	50	53

CAL YR 1979 TOTAL 103691 MEAN 284 MAX 2260 MIN 48
WTR YR 1980 TOTAL 66958 MEAN 183 MAX 2100 MIN 46

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY

LOCATION.--Lat 42°56'19", long 73°22'39", Rensselaer County, Hydrologic Unit 02020003, on right bank 0.5 mi (0.8 km) upstream from Case Brook, 1.2 mi (1.9 km) downstream from Walloomsac River, and 1.2 mi (1.9 km) southeast of Eagle Bridge.

DRAINAGE AREA.--510 mi^2 (1,321 km^2).

PERIOD OF RECORD.--August 1910 to March 1922, July 1923 to current year.

REVISED RECORDS.--WSP 741: Drainage area. WSP 756: 1913(m). WSP 1302: 1922(M). WSP 1432: 1913 (minimum gage height). WSP 1502: 1911-12, 1914, 1920-21, 1928(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 355.41 ft (108.329 m) National Geodetic Vertical Datum of 1929. Prior to March 1922, nonrecording gage and July 24, 1923 to July 18, 1936, water-stage recorder, at site 0.2 mi (0.3 km) upstream at different datums.

REMARKS.--Records fair except those for winter periods, which are poor. Diurnal fluctuation at medium and low flow caused by powerplants above station.

AVERAGE DISCHARGE.--68 years (1910-21, 1923-80), 945 ft^3/s (26.76 m^3/s), 25.16 in/yr (639 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,400 ft^3/s (1,570 m^3/s) Dec. 31, 1948, gage height, 21.15 ft (6.447 m), from highwater mark in gage house, from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of peak flow over downstream dams and contracted-opening measurements at gage heights 17.8 ft (5.42 m) and 21.15 ft (6.447 m); minimum, 24 ft^3/s (0.68 m^3/s) Sept. 14, 1913; minimum daily, 30 ft^3/s (0.85 m^3/s) Sept. 14, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,400 ft^3/s (210 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0545	7,890	223	8.86	2.701	Mar. 22	0945	*15,100	428	*11.66	3.554
Mar. 8	2100	ice jam		8.52	2.597	Apr. 10	1215	12,800	362	10.86	3.310

Minimum discharge, 131 ft^3/s (3.71 m^3/s) Sept. 13. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	718	457	1230	660	270	190	2080	967	296	894	179	178
2	2930	467	1100	620	260	190	2030	869	283	541	543	225
3	2080	1760	958	560	260	190	1900	800	382	473	317	473
4	4070	1540	901	480	250	200	2580	726	467	387	291	290
5	2180	1100	854	470	240	250	3030	655	392	331	238	223
6	2970	958	815	450	240	450	2190	628	322	483	246	206
7	2040	934	958	430	240	420	2080	800	344	363	242	183
8	1630	942	877	410	240	2200	2060	877	431	331	208	159
9	1640	926	718	400	240	1500	2140	755	377	483	197	146
10	1640	1210	690	410	240	800	9010	669	377	368	183	137
11	1380	1520	676	430	240	960	4580	621	354	309	173	134
12	1270	1320	676	893	230	450	2970	635	326	304	258	134
13	1640	1310	676	620	230	380	2750	711	296	287	254	131
14	1290	1190	655	560	230	360	2350	846	270	250	212	146
15	1110	992	589	520	230	340	2620	726	266	234	372	169
16	1010	926	578	480	220	350	2360	635	909	223	270	156
17	901	846	1000	450	220	538	1970	578	543	296	219	143
18	830	823	700	420	230	4380	1760	555	382	313	190	436
19	762	785	540	400	250	2040	1560	733	326	234	179	308
20	718	726	560	380	260	1490	1430	642	300	215	192	219
21	690	676	580	370	260	1920	1380	578	300	219	179	186
22	669	642	620	360	250	10500	1230	549	291	234	169	186
23	635	635	648	350	250	3480	1110	516	266	372	162	176
24	648	621	676	340	240	2550	1030	478	250	344	156	153
25	635	785	1430	330	230	2500	967	436	230	250	146	143
26	566	1140	1620	320	220	2080	917	401	219	215	146	193
27	532	4960	1170	310	210	1710	861	387	208	197	140	215
28	516	2320	958	300	200	1660	869	368	201	186	137	179
29	516	1710	893	290	190	2090	1070	349	226	176	137	159
30	494	1420	846	290	---	3290	1200	331	1540	179	143	150
31	467	---	748	280	---	2620	---	313	---	183	193	---
TOTAL	39177	35641	25940	13583	6870	52078	64084	19134	11374	9874	6671	5936
MEAN	1264	1188	837	438	237	1680	2136	617	379	319	215	198
MAX	4070	4960	1620	893	270	10500	9010	967	1540	894	543	473
MIN	467	457	540	280	190	190	861	313	201	176	137	131
CFSM	2.48	2.33	1.64	.86	.47	3.29	4.19	1.21	.74	.63	.42	.39
IN.	2.86	2.60	1.89	.99	.50	3.80	4.67	1.40	.83	.72	.49	.43

CAL YR 1979 TOTAL 499362 MEAN 1368 MAX 16200 MIN 159 CFSM 2.68 IN 36.42
WTR YR 1980 TOTAL 290362 MEAN 793 MAX 10500 MIN 131 CFSM 1.56 IN 21.18

01335770 HUDSON RIVER AT WATERFORD, NY

LOCATION.--Lat 42°47'19", long 73°40'28", at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on U.S. Highway 4 in Waterford, 0.4 mi (0.6 km) upstream from first branch of Mohawk River, and 2.8 mi (4.5 km) downstream from dam at lock 1 of the Champlain (Barge) Canal.

DRAINAGE AREA.--4,620 mi^2 (11,966 km^2).

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (b), 1977 (c), 1978-79 (d), 1980 (e).
MINOR ELEMENTS DATA: 1975-76 (c), 1977-79 (e), 1980 (d).
PESTICIDE DATA: 1975 (b), 1976 (d), 1977-79 (e), 1980 (a).
ORGANIC DATA: OC--1975-77 (c), 1978 (d), 1979 (c).
PCB--1975 (b), 1976 (d), 1977-80 (e).
PCN--1977-79 (e), 1980 (a).
NUTRIENT DATA: 1975-76 (c), 1977-78 (e), 1979-80 (d).
BIOLOGICAL DATA:
Bacteria--1977 (c), 1978 (d), 1979 (e), 1980 (d).
SEDIMENT DATA: 1975 (b), 1976-77 (e), 1978 (a), 1979 (b), 1980 (c).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.--Water discharge data based on records obtained at site 3.2 mi (5.1 km) upstream. Water-discharge records are fair, except for July to September which are poor because of instrument problems. Streamflow affected by regulation for power generation and diversion for canal operations.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 810 mg/L March 14, 1977; minimum daily mean, 1 mg/L Dec. 27, 1976, March 2, 6, 1978, Sept. 3, 1979, Mar. 4, 1980.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 119,000 tons (108,000 Mg) March 14, 1977; minimum daily, 6.4 tons (5.8 Mg) Sept. 3, 1979.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 138 mg/L March 22; minimum daily mean, 1 mg/L Mar. 4.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 11,000 tons (9,980 Mg) March 22; minimum daily, 7.9 tons (7.2 Mg) Sept. 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
MAR								
18...	1800	18700	135	6820	24	36	48	61
18...	2200	23600	122	7770	26	41	56	71
22...	1500	39600	191	20400	30	43	60	78
22...	2100	43900	327	38800	24	39	58	78
22...	2400	41200	255	28400	26	43	61	81
APR								
10...	1930	34800	186	17500	22	38	46	63
11...	0030	36500	203	20000	26	38	52	68

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
MAR							
18...	75	78	93	98	100	--	--
18...	83	85	94	98	100	--	--
22...	90	92	98	99	100	--	--
22...	91	92	99	100	--	--	--
22...	92	93	98	100	--	--	--
APR							
10...	74	82	92	98	99	99	100
11...	78	85	94	99	99	100	--

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
23...	1330	6330	126	7.2	14.5	11.2	109	15	770	12	—	.37
26...a/	1100	7100	—	—	—	—	—	—	—	13	6	—
31...a/	1400	6050	—	—	—	—	—	—	—	9	0	—
NOV												
07...	1300	8630	121	7.2	13.5	11.3	108	31	K1000	9	—	.23
27...	1430	21600	155	6.7	9.5	—	—	—	—	53	0	—
28...a/	0815	27900	94	6.7	9.0	—	—	—	—	48	4	—
28...	0820	—	94	6.7	9.0	—	—	—	—	—	—	—
DEC												
12...	1100	8630	118	7.2	4.0	13.7	104	14	K800	10	—	.25
27...	1200	10600	110	6.5	—	—	—	—	—	17	8	—
JAN												
04...	1400	7650	94	7.0	1.0	13.7	94	18	K200	5	—	.36
FEB												
25...	0900	2140	149	7.0	1.0	—	—	—	—	4	6	—
25...	0905	—	—	—	—	—	—	—	—	—	—	—
MAR												
03...	1315	1480	162	6.8	.0	—	—	—	—	58	7	—
10...	0945	6740	152	6.8	2.0	—	—	—	—	32	7	—
18...	1100	11700	170	7.2	.0	14.4	103	18	440	32	—	.75
18...	1800	18700	—	—	—	—	—	—	—	—	—	—
18...	2200	23600	—	—	—	—	—	—	—	—	—	—
22...	1030	30200	139	7.2	4.0	—	—	—	—	12	1	—
22...	1500	39600	—	—	—	—	—	—	—	—	—	—
22...	1615	41200	132	7.1	4.0	—	—	—	—	139	73	—
22...	2100	43900	—	—	—	—	—	—	—	—	—	—
22...	2300	42400	123	7.1	4.0	—	—	—	—	247	142	—
22...	2305	—	—	—	—	—	—	—	—	—	—	—
22...	2400	41200	—	—	—	—	—	—	—	—	—	—
23...	1115	24500	96	6.9	4.0	—	—	—	—	80	17	—
APR												
07...	1400	12000	119	7.1	6.0	12.2	109	20	K400	0	—	.22
10...	1145	24200	113	7.0	8.5	—	—	—	—	42	21	—
10...	1930	34800	—	—	—	—	—	—	—	—	—	—
11...	0030	36500	—	—	—	—	—	—	—	—	—	—
11...	0445	37800	85	6.9	8.0	—	—	—	—	117	25	—
11...	1145	36000	79	7.0	7.0	—	—	—	—	15	0	—
MAY												
12...	1400	5074	148	7.0	15.0	10.6	105	19	K60	12	—	.50
29...	1415	2000	126	6.9	20.5	—	—	—	—	11	11	—
JUN												
09...	1330	4950	132	6.7	18.0	9.0	93	18	460	8	—	—
16...	0945	3760	90	7.2	19.0	—	—	—	—	22	6	—
16...	0950	—	—	—	—	—	—	—	—	—	—	—
23...	0900	1580	107	7.7	21.0	—	—	—	—	4	6	—
23...	0905	—	107	7.7	21.0	—	—	—	—	—	—	—
30...	0600	1260	126	7.3	—	—	—	—	—	5	3	—
JUL												
02...	1245	3940	161	7.2	24.0	—	—	—	—	6	6	—
02...	1250	—	—	—	—	—	—	—	—	—	—	—
07...	0800	1560	142	7.3	—	—	—	—	—	6	1	—
14...	1100	1340	136	8.5	24.5	—	—	—	—	5	5	—
14...	1400	1340	133	8.5	25.0	8.5	109	20	100	8	—	—
16...	1045	2820	126	8.0	26.5	—	—	—	—	4	3	—
18...	1230	2700	144	8.1	26.5	—	—	—	—	6	6	—
21...	0915	1300	119	7.3	27.0	—	—	—	—	4	4	—
24...	0900	3220	145	7.5	26.0	—	—	—	—	7	4	—
28...	0845	1900	149	8.0	26.0	—	—	—	—	6	2	—
28...	0850	—	149	8.0	26.0	—	—	—	—	—	—	—
31...	1300	3930	138	7.4	26.5	—	—	—	—	7	4	—
AUG												
04...	0930	1300	160	7.3	26.0	—	—	—	—	6	4	—
06...	1030	2500	135	7.2	26.5	—	—	—	—	6	2	—
11...	0715	1830	108	7.0	27.5	—	—	—	—	—	—	—
11...	1430	2250	130	6.3	26.0	7.3	91	24	120	3	—	—
18...	0900	1440	138	7.2	—	—	—	—	—	0	0	—
22...	1100	3160	145	7.4	—	—	—	—	—	5	5	—
25...	0930	1300	171	7.4	24.0	—	—	—	—	2	2	—
27...	0845	3000	130	7.5	24.5	—	—	—	—	9	4	—
SEP												
02...	0915	1150	127	7.3	24.5	—	—	—	—	0	0	—
02...	1530	1280	131	6.5	25.5	6.8	85	20	200	0	—	—
04...	1330	3940	155	7.6	24.5	—	—	—	—	0	2	—
15...	0900	1360	124	6.9	19.5	—	—	—	—	2	2	—
18...	1000	2580	143	7.1	19.0	—	—	—	—	2	1	—
22...	0900	1420	138	7.2	20.0	—	—	—	—	6	4	—

a/ Also includes 0.00 µg/L PCN, total and 0.00 µg/L aldrin, total.

K Results based on colony count outside the acceptable range (non-ideal colony count).

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PCB, TOTAL (UG/L)	PCB, DIS-SOLVED (UG/L)
OCT												
23...	.46	.83	.040	--	--	--	1	0	10	.00	--	--
26...	--	--	--	330	1	20	--	--	--	--	.4	--
31...	--	--	--	230	0	20	--	--	--	--	.3	--
NOV												
07...	.42	.65	.040	--	--	--	0	0	20	.00	--	--
27...	--	--	--	2900	--	190	--	--	--	--	.1	.0
28...	--	--	--	2700	--	150	--	--	--	--	.3	--
28...	--	--	--	--	--	--	--	--	--	--	.4	.0
DEC												
12...	.40	.65	.030	--	--	--	1	0	10	.00	--	--
27...	--	--	--	--	--	--	--	--	--	--	.0	--
JAN												
04...	.44	.80	.020	--	--	--	3	1	10	.05	--	--
FEB												
25...	--	--	--	--	--	--	--	--	--	--	.1	.0
25...	--	--	--	--	--	--	--	--	--	--	.0	--
MAR												
03...	--	--	--	--	--	--	--	--	--	--	.1	--
10...	--	--	--	--	--	--	--	--	--	--	.1	--
18...	.69	1.4	.150	--	--	--	3	0	20	.00	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	1400	3	60	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	.1	--
22...	--	--	--	6200	16	260	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	.1	--
22...	--	--	--	6200	14	320	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	.1	--
22...	--	--	--	--	--	--	--	--	--	--	.1	--
23...	--	--	--	2600	6	120	--	--	--	--	--	--
APR												
07...	1.4	1.6	.040	--	--	--	3	9	180	.00	--	--
10...	--	--	--	3400	--	140	--	--	--	--	.1	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	6600	--	270	--	--	--	--	.4	--
11...	--	--	--	670	--	30	--	--	--	--	.5	--
MAY												
12...	.36	.86	.040	--	--	--	0	0	10	.00	--	--
29...	--	--	--	--	--	--	--	--	--	--	.1	--
JUN												
09...	.48	--	.040	--	--	--	--	--	--	.00	--	--
16...	--	--	--	--	--	--	--	--	--	--	.2	--
16...	--	--	--	--	--	--	--	--	--	--	.2	--
23...	--	--	--	--	--	--	--	--	--	--	.2	.1
23...	--	--	--	--	--	--	--	--	--	--	.2	--
30...	--	--	--	--	--	--	--	--	--	--	--	.3
JUL												
02...	--	--	--	--	--	--	--	--	--	--	.3	.3
02...	--	--	--	--	--	--	--	--	--	--	.1	--
07...	--	--	--	--	--	--	--	--	--	--	.3	.3
14...	--	--	--	--	--	--	--	--	--	--	.2	.2
14...	.51	--	.040	--	--	--	--	--	--	.00	--	--
16...	--	--	--	--	--	--	--	--	--	--	.2	.3
18...	--	--	--	--	--	--	--	--	--	--	.3	--
21...	--	--	--	--	--	--	--	--	--	--	.4	.2
24...	--	--	--	--	--	--	--	--	--	--	.3	--
28...	--	--	--	--	--	--	--	--	--	--	.3	.1
28...	--	--	--	--	--	--	--	--	--	--	.3	--
31...	--	--	--	--	--	--	--	--	--	--	.3	--
AUG												
04...	--	--	--	--	--	--	--	--	--	--	.2	--
06...	--	--	--	--	--	--	--	--	--	--	.2	.2
11...	--	--	--	--	--	--	--	--	--	--	.3	.2
11...	.33	--	.030	--	--	--	4	3	40	.00	--	--
18...	--	--	--	--	--	--	--	--	--	--	.1	--
22...	--	--	--	--	--	--	--	--	--	--	.3	--
25...	--	--	--	--	--	--	--	--	--	--	.2	--
27...	--	--	--	--	--	--	--	--	--	--	.2	--
SEP												
02...	--	--	--	--	--	--	--	--	--	--	.2	.2
02...	.36	--	.310	--	--	--	4	0	30	.00	--	--
04...	--	--	--	--	--	--	--	--	--	--	.2	--
15...	--	--	--	--	--	--	--	--	--	--	.4	--
18...	--	--	--	--	--	--	--	--	--	--	.4	--
22...	--	--	--	--	--	--	--	--	--	--	.4	--

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	3190	24	207	5860	5	79	14100	10	381
2	5590	42	634	5820	7	110	11600	7	219
3	5290	38	543	7070	10	191	8860	7	167
4	8570	33	764	9820	11	292	10000	6	162
5	6380	31	534	6190	9	150	9750	5	132
6	8070	28	610	7640	8	165	9940	5	134
7	9390	20	507	8130	7	154	10000	5	135
8	8630	18	419	7690	7	145	9630	5	130
9	8130	12	263	7640	6	124	8800	6	143
10	9090	9	221	7690	6	125	6000	3	49
11	7530	9	183	9270	8	200	7530	2	41
12	8020	11	238	7480	9	182	8350	3	68
13	8130	12	263	8520	10	230	8570	2	46
14	7960	12	258	8630	8	186	8750	2	47
15	5590	12	181	8240	6	133	8520	2	46
16	7320	12	237	7800	5	105	7910	2	43
17	7750	12	251	7590	5	102	11000	2	59
18	7270	10	196	6870	5	93	8160	2	44
19	7070	7	134	5240	4	57	7650	2	41
20	7020	7	133	6190	3	50	7040	2	38
21	6280	9	153	6720	4	73	7140	2	39
22	4580	9	111	6570	4	71	7440	2	40
23	5860	9	142	6420	4	69	7340	2	40
24	6420	9	156	6420	4	69	7760	2	42
25	6420	6	104	6190	4	67	8710	8	188
26	6190	6	100	5590	4	60	11300	18	549
27	6520	8	141	19000	59	3030	10500	13	369
28	6050	7	114	25900	78	5450	10000	5	135
29	4270	4	46	21100	31	1770	9750	2	53
30	4950	6	80	16300	16	704	9520	3	77
31	5910	5	80	---	---	---	8900	6	144
TOTAL	209440	---	8003	269590	---	14236	280520	---	3801

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	8460	2	46	4830	5	65	4010	11	119
2	8140	3	66	4710	3	38	3280	2	18
3	7970	3	65	4200	3	34	2300	2	12
4	7550	2	41	3210	4	35	3680	1	9.9
5	7380	2	40	4450	4	48	3570	2	19
6	6970	2	38	4480	3	36	4090	2	22
7	6700	2	36	4200	3	34	4200	4	45
8	6870	3	56	4120	3	33	6250	20	337
9	6700	4	72	4260	5	58	10600	47	1350
10	10200	5	138	3840	3	31	6800	27	496
11	6310	6	102	3090	3	25	6280	26	441
12	6540	7	124	3790	3	31	5740	16	248
13	6870	8	148	4260	2	23	4920	15	199
14	5070	8	110	3980	2	21	4510	13	158
15	7340	7	139	4280	3	35	4310	7	81
16	7270	9	177	3900	3	32	3040	6	49
17	6940	5	94	3340	3	27	3040	4	33
18	6570	5	89	2230	3	18	13500	72	2620
19	6340	3	51	3570	3	29	13400	89	3220
20	5520	4	60	4200	3	34	9560	38	981
21	4480	4	48	4200	3	34	8820	19	452
22	5340	3	43	4830	2	26	29400	138	11000
23	4860	3	39	4230	3	34	25300	104	7100
24	5130	3	42	4060	2	22	14900	26	1050
25	5580	5	75	2890	4	31	13700	21	777
26	5100	4	55	3710	4	40	13200	17	606
27	4120	3	33	4280	3	35	11500	13	404
28	3710	3	30	4200	4	45	10300	9	250
29	5070	16	219	3870	2	21	10200	35	964
30	5370	5	72	---	---	---	14900	55	2210
31	5190	7	98	---	---	---	14800	25	999
TOTAL	195660	---	2446	115210	---	975	284100	---	36269.9

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	12900	14	488	9150	12	296	2440	2	13
2	11800	7	223	8350	4	90	2410	5	33
3	11300	9	275	7750	3	63	3660	10	99
4	11600	15	470	7070	5	95	4510	4	49
5	14400	21	816	6230	4	67	5500	11	163
6	13600	10	367	5640	3	46	5950	7	112
7	12100	13	425	6140	6	99	5820	5	79
8	9700	16	419	5820	5	79	5120	3	41
9	11300	13	397	5330	2	29	4510	5	61
10	24400	82	5400	5460	5	74	5200	6	84
11	35100	112	10600	4910	3	40	5820	6	94
12	25200	34	2310	5160	3	42	5770	5	78
13	19500	17	895	6570	10	177	5240	6	85
14	16900	11	502	6520	6	106	4780	7	90
15	16700	19	857	6420	4	69	3620	7	68
16	18800	17	863	6330	5	85	3980	5	54
17	16800	7	318	5460	3	44	4540	6	74
18	13700	8	296	5160	3	42	3620	8	78
19	12200	12	395	5070	2	27	3520	7	67
20	10800	9	262	6330	2	34	3280	8	71
21	9330	5	126	6190	2	33	3320	5	45
22	8520	10	230	6330	4	68	2520	7	48
23	7850	9	191	5590	5	75	2410	4	26
24	6970	6	113	5590	3	45	3590	5	48
25	6330	3	51	4830	7	91	3220	4	35
26	6280	4	68	3480	2	19	3060	5	41
27	6720	4	73	3690	4	40	3030	6	49
28	7220	4	78	4700	5	63	2700	6	44
29	7750	4	84	2730	5	37	2280	5	31
30	9880	7	187	2970	5	40	2070	5	28
31	---	---	---	2870	4	31	---	---	---
TOTAL	395650	---	27779	173840	---	2146	117490	---	1888

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	3760	6	61	2760	6	45	1280	6	21
2	3800	4	41	2700	5	36	1460	2	7.9
3	3980	5	54	2640	4	29	3590	4	39
4	2500	6	40	1670	5	23	3620	4	39
5	2150	6	35	2580	6	42	3280	4	35
6	2470	4	27	2780	4	30	3220	5	43
7	2390	6	39	3350	5	45	2390	5	32
8	3190	7	60	2760	5	37	1500	6	24
9	3380	7	64	2730	6	44	2940	4	32
10	3690	7	70	2440	6	40	2870	3	23
11	3690	7	70	2390	7	45	2500	4	27
12	3690	6	60	3220	5	43	2580	4	28
13	2910	7	55	3320	6	54	2970	5	40
14	1970	7	37	3060	6	50	2390	4	26
15	3350	8	72	3090	5	42	1520	4	16
16	3060	5	41	3250	6	53	3190	5	43
17	3190	6	52	2470	6	40	2970	6	48
18	2910	4	31	1950	4	21	2760	4	30
19	2760	8	60	3060	5	41	3120	7	59
20	2360	5	32	3090	5	42	3120	5	42
21	1900	5	26	3000	5	40	2360	4	25
22	2870	6	46	3060	7	58	1540	3	12
23	3000	6	49	2970	5	40	2670	5	36
24	3450	6	56	2330	8	50	2610	5	35
25	3090	7	58	1740	8	38	2810	6	46
26	2670	9	65	2730	4	29	2870	5	39
27	2150	8	46	2810	6	46	3220	4	35
28	1830	6	30	2870	4	31	2500	4	27
29	2550	8	55	2780	4	30	2440	4	26
30	2840	8	61	2760	4	30	3320	3	27
31	3250	4	35	2250	5	30	---	---	---
TOTAL	90800	---	1528	84610	---	1224	79610	---	962.9

01336000 MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, NY

LOCATION.--Lat 43°15'52", long 75°26'12", Oneida County, Hydrologic Unit 02020004, on right bank at Rome Fish Hatchery, 1.0 mi (1.6 km) downstream from Delta Dam, and 4.0 mi (6.4 km) north of Rome.

DRAINAGE AREA.--150 mi² (389 km²).

PERIOD OF RECORD.--July 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 851: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 474.00 ft (144.475 m) Barge Canal datum. Prior to Jan. 24, 1937, nonrecording gage at site 200 ft (61 m) downstream at same datum.

REMARKS.--Records good. During canal navigation season, water is diverted from Black River through Forestport feeder and Black River Canal (flowing south) into basin above Delta Reservoir (see station 04252000). Flow regulated by Delta Reservoir (usable capacity, 2,800 mil ft^3 or 79.0 hm^3) except for Apr. 4 to May 24, June 4 to June 14, when reservoir spilled. Small quantity of water diverted from Delta Reservoir for fish hatchery use and later returned to river, part above and part below station.

AVERAGE DISCHARGE.--59 years, 379 ft^3/s (10.73 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,560 ft^3/s (242 m^3/s) Oct. 2, 1945, gage height, 11.18 ft (3.408 m); minimum, 30 ft^3/s (0.85 m^3/s) Sept. 27, 1945, gage height, 0.65 ft (0.198 m); minimum daily, 45 ft^3/s (1.27 m^3/s) Jan. 17, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,660 ft^3/s (132 m^3/s) Apr. 10, gage height, 8.54 ft (2.603 m); minimum, 24 ft^3/s (0.68 m^3/s) July 30, gage height, 0.67 ft (0.204 m); minimum daily, 121 ft^3/s (3.60 m^3/s) July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	208	224	274	248	191	232	560	256	268	259	232
2	203	214	221	274	198	191	229	431	298	265	259	292
3	203	221	219	271	198	189	226	396	286	265	259	274
4	201	214	219	274	198	191	452	368	336	265	259	251
5	201	211	219	274	198	189	1210	375	323	265	259	251
6	216	208	221	271	198	191	1090	298	295	265	262	248
7	208	208	226	271	198	191	826	254	358	265	259	245
8	206	211	224	271	198	191	716	219	456	262	256	245
9	208	211	221	271	196	191	1460	203	501	262	256	298
10	208	240	221	464	196	191	3820	189	442	259	256	352
11	206	219	194	605	196	191	1860	184	339	256	256	298
12	206	216	280	609	196	191	1120	184	262	256	256	221
13	208	214	277	605	196	191	1250	184	372	256	254	221
14	208	216	274	621	196	189	958	191	471	254	254	221
15	208	214	274	899	196	189	1030	189	442	254	254	259
16	208	216	274	1070	196	189	923	184	410	254	251	289
17	208	214	274	1050	196	189	677	181	355	254	251	289
18	208	216	271	1040	194	211	524	206	165	251	251	289
19	208	214	271	1040	194	211	434	336	277	254	251	289
20	208	214	271	651	194	216	368	339	286	259	248	286
21	208	214	271	274	194	323	326	286	289	268	232	286
22	206	214	271	274	194	277	295	240	283	274	219	286
23	206	214	271	271	194	232	342	211	277	268	219	286
24	211	214	289	271	194	242	313	191	274	262	219	283
25	211	216	310	271	194	271	277	196	274	259	226	283
26	211	286	286	271	194	234	268	186	271	254	232	283
27	211	262	280	274	194	232	251	181	268	251	232	283
28	208	232	277	271	191	240	251	179	268	251	232	280
29	208	226	277	271	191	265	613	179	268	254	232	280
30	208	226	277	268	---	271	739	219	268	127	232	280
31	208	---	274	268	---	240	---	256	---	131	232	---
TOTAL	6429	6603	7958	14089	5720	6700	23080	7795	9670	7788	7617	8180
MEAN	207	220	257	454	197	216	769	251	322	251	246	273
MAX	216	286	310	1070	248	323	3820	560	501	274	262	352
MIN	201	208	194	268	191	189	226	179	165	127	219	221

CAL YR 1979 TOTAL 135657 MEAN 372 MAX 2700 MIN 154
WTR YR 1980 TOTAL 111629 MEAN 305 MAX 3820 MIN 127

01346000 WEST CANADA CREEK AT KAST BRIDGE, NY

LOCATION.--Lat 43°04'08", long 74°59'26", Herkimer County, Hydrologic Unit 02020004, on left bank 600 ft (183 m) downstream from bridge on old State Highway 28 at Kast Bridge, 1.2 mi (1.9 km) downstream from North Creek, 2.2 mi (3.5 km) north of Herkimer, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--556 mi^2 (1,440 km^2).

PERIOD OF RECORD.--May 1905 to December 1906 (gage height and discharge measurements only), January 1907, April to December 1907, March 1908 to December 1909, April 1910 to December 1913, April to December 1914, April 1915 to January 1917, April to November 1917, April to June 1918, October 1920 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 438.99 ft (133.804 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1920, nonrecording gage at former highway bridge 500 ft (152 m) upstream at different datum.

REMARKS.--Records poor. Since March 1914, flow regulated by Hinckley Reservoir, 31 mi (50 km) above station (usable capacity, 3,320 mil ft^3 or 94.0 hm^3). Diurnal fluctuation at low and medium flow caused by powerplants above station. Diversion at Trenton Falls, 26 mi (42 km) above station, by Ninemile feeder since 1915 during canal navigation season. Diversion from Hinckley Reservoir for Utica water supply returned to Mohawk River.

AVERAGE DISCHARGE.--60 years (1920-80), 1,318 ft^3/s (37.33 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,300 ft^3/s (660 m^3/s) Mar. 26, 1913, from reports of State Engineer and Surveyor; maximum gage height, 10.47 ft (3.191 m) probably Feb. 17, 1943, from floodmark in gage well (ice jam); minimum discharge, 20 ft^3/s (0.57 m^3/s) Sept. 3, 1929, gage height, 0.90 ft (0.274 m); minimum daily, 59 ft^3/s (1.67 m^3/s) Sept. 2, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,400 ft^3/s (493 m^3/s) Mar. 21, gage height, 7.55 ft (2.301 m); minimum, 175 ft^3/s (4.96 m^3/s) Mar. 1, gage height, 1.72 ft (0.524 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	987	1200	1120	1100	477	2040	1650	507	629	1010	505
2	448	1020	1140	1130	1100	478	2080	1610	1120	609	659	1060
3	479	1320	1120	1120	1100	513	1890	1410	1040	614	515	1300
4	437	1070	1070	1220	1100	417	2610	1510	953	502	693	694
5	439	1040	1180	1260	1100	381	3250	1490	723	548	616	723
6	591	998	1150	1250	1100	456	3720	1480	695	526	704	530
7	464	1040	1090	1240	1040	417	3280	1290	1170	591	625	438
8	497	1060	1250	1290	857	523	3080	1460	1100	639	581	690
9	528	1020	1160	1130	830	551	4110	1330	990	691	565	800
10	589	1460	1080	1190	753	472	8270	1300	964	604	470	618
11	533	1140	1200	1230	865	485	8630	1360	894	539	484	602
12	559	1070	1310	1210	806	468	5640	1290	657	464	694	825
13	737	1060	1400	1190	742	468	4650	1190	738	381	480	558
14	483	1070	1150	1500	562	482	3980	1340	791	535	615	736
15	511	1170	1150	1730	604	455	3960	1290	508	535	713	804
16	634	1120	1140	1350	618	464	3920	1090	758	559	562	690
17	492	1110	1180	1250	667	373	3260	1030	739	575	521	719
18	461	1010	1130	1240	739	1530	2430	1230	657	556	539	903
19	364	1080	1180	1150	620	1080	2220	1590	440	491	578	823
20	660	1020	1260	1120	594	1130	1750	1080	783	470	517	396
21	391	961	1230	1170	472	5740	1670	972	834	895	467	500
22	580	1120	1240	1180	455	4940	1440	953	605	1380	497	537
23	668	1030	1120	1180	401	1920	1530	1010	637	829	612	750
24	1010	1040	1340	1080	367	2340	1510	958	687	703	463	661
25	925	1150	2080	1050	476	3080	1550	880	575	719	500	771
26	954	1770	1600	1120	445	1860	1560	787	536	641	1240	825
27	975	2350	1260	1100	448	1970	1530	889	584	383	2010	605
28	931	1330	1190	979	441	2230	1550	811	542	579	559	467
29	956	1290	1190	1070	473	3050	2140	808	407	612	600	759
30	905	1250	1180	1080	---	3190	1880	738	584	714	581	566
31	1020	---	1130	1070	---	2350	---	696	---	588	514	---
TOTAL	19649	35156	38100	36999	20875	44290	91130	36522	22218	19101	20184	20855
MEAN	634	1172	1229	1194	720	1429	3038	1178	741	616	651	695
MAX	1020	2350	2080	1730	1100	5740	8630	1650	1170	1380	2010	1300
MIN	364	961	1070	979	367	373	1440	696	407	381	463	396

CAL YR 1979 TOTAL 535243 MEAN 1466 MAX 10700 MIN 210
WTR YR 1980 TOTAL 405079 MEAN 1107 MAX 8630 MIN 364

01347000 MOHAWK RIVER NEAR LITTLE FALLS, NY

LOCATION.--Lat 43°00'52", long 74°46'48", Herkimer County, Hydrologic Unit 02020004, on left bank 1,800 ft (549 m) downstream from Rocky Rift Dam, 2.1 mi (3.4 km) upstream from East Canada Creek, and 4.5 mi (7.2 km) southeast of city of Little Falls.

DRAINAGE AREA.--1,348 mi^2 (3,491 km^2).

PERIOD OF RECORD.--October 1927 to current year.

REVISED RECORDS.--WSP 741: 1929(M), Drainage area. WSP 1302: 1901, 1932(M). WSP 1432: 1928-30.

GAGE.--Water-stage recorder. Datum of gage is 308.84 ft (94.134 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Record fair. Records of daily discharge do not include diversion at Rocky Rift Dam into Erie (Barge) Canal for lockages at lock 16, near St. Johnsville. Monthly and annual figures of diversion at Rocky Rift Dam are published separately below. During canal navigation season, water is received from Black River basin through Black River Canal flowing south (see station 04252000), and from Chenango River basin through Oriskany Creek feeder. Water is diverted into (or may occasionally be received from) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica. Diurnal fluctation caused by powerplants and locks and dams on Erie (Barge) Canal. Regulation by Delta and Hinckley Reservoirs (combined usable capacity, 6,120 mil ft^3 or 173 hm^3) (see Reservoirs in Hudson River Basin).

AVERAGE DISCHARGE.--53 years, 2,802 ft^3/s (79.35 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (river channel only), 33,100 ft^3/s (937 m^3/s) Mar. 14, 1977, gage height, 19.17 ft (5.843 m), from high-water mark in gage house; minimum (river channel only), 214 ft^3/s (6.06 m^3/s) Aug. 18, 1949, gage height, 3.75 ft (1.43 m); minimum daily (including canal), probably not less than 463 ft^3/s (13.1 m^3/s) Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 16,000 ft^3/s (450 m^3/s):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	2315	29,000	821	17.93	5.465

Minimum discharge recorded (river channel only), 568 ft^3/s (16.09 m^3/s) Aug. 25, gage height, 4.59 ft (1.399 m); minimum daily (river channel only), 729 ft^3/s (20.6 m^3/s) Aug. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	737	1740	2440	2170	1500	780	6540	3970	1080	1580	1030	888
2	861	1440	2240	2160	1400	760	5290	3030	1630	1390	1490	1210
3	892	2520	2100	1960	1400	740	4340	2770	2000	1330	1190	2060
4	856	2640	1980	1780	1300	760	5080	2730	1770	1230	1080	1530
5	851	2150	2070	1850	1450	800	7100	2570	1450	1050	1240	1330
6	1050	1870	3080	1780	1360	905	7520	2480	1340	1230	1220	1600
7	1240	1800	2590	1770	1380	958	6690	2200	1990	1270	1220	940
8	936	1870	2210	1930	1370	1160	5710	2240	2810	1260	1140	985
9	1040	1810	2040	1710	1230	1980	6580	2100	2790	1420	904	1120
10	1120	2370	2060	1660	1240	1820	11900	2020	2460	1260	791	1080
11	1070	2590	1980	1870	1030	1970	14300	2010	2110	1140	1010	1040
12	1030	2130	2160	2270	1290	1720	11400	1970	1640	1100	1100	1210
13	1250	1960	2760	2130	1280	1360	9030	1890	1380	957	983	1020
14	1210	1900	3220	2360	1040	1180	7750	2150	1510	950	1150	961
15	990	2050	2490	4390	1000	1210	7730	2130	1340	1000	1190	1170
16	1210	2010	2190	4120	980	1130	8110	1830	2080	1020	977	1160
17	1000	1960	2290	3330	960	1040	6960	1670	1910	1110	856	1110
18	914	1860	2160	3050	920	3820	4310	1770	1520	1070	1010	1610
19	910	1840	1960	2870	900	5750	3730	2440	1240	1030	1050	1400
20	982	1800	2060	2730	880	5330	3400	2160	1360	949	916	1050
21	996	1730	1990	2340	880	12800	2810	1870	1870	1000	866	924
22	940	1810	2020	1990	900	17800	2820	1700	1620	2970	910	1010
23	1070	1750	2040	1930	918	11000	2670	1650	1320	2850	934	1200
24	1540	1790	2500	1670	951	9150	2600	1550	1330	1850	729	1190
25	1660	2200	5080	1590	1020	9630	2660	1440	1230	1490	813	1020
26	1720	3350	5050	1620	1060	7340	2650	1310	1120	1290	957	1460
27	1650	7980	3650	1700	840	6250	2540	1380	1110	1060	734	1150
28	1610	5550	2830	1540	830	5730	2500	1310	1130	884	825	1040
29	1610	3540	2580	1710	820	7460	4210	1340	1080	1140	891	990
30	1590	2510	2460	1670	---	9590	5050	1200	1240	1180	900	1100
31	1640	---	2300	1600	---	8260	---	1220	---	1340	856	---
TOTAL	36175	72520	78580	67250	32129	140183	173980	62100	48460	40400	30962	35558
MEAN	1167	2417	2535	2169	1108	4522	5799	2003	1615	1303	999	1185
MAX	1720	7980	5080	4390	1500	17800	14300	3970	2810	2970	1490	2060
MIN	737	1440	1960	1540	820	740	2500	1200	1080	884	729	888
‡	17.1	8.1	0.6	0	0	0	0.1	15.6	17.7	20.0	14.5	15.1

CAL YR 1979 TOTAL 1107558 MEAN 3034 MAX 22100 MIN 583 ‡ 9.8
WTR YR 1980 TOTAL 818297 MEAN 2236 MAX 17800 MIN 729 ‡ 9.1

‡ Diversion, equivalent in cubic feet per second, at Rocky Rift Dam into Erie (Barge) Canal for lockages at Lock 16.

01348000 EAST CANADA CREEK AT EAST CREEK, NY

LOCATION.--Lat 43°01'00", long 74°44'28", Herkimer County, Hydrologic Unit 0202004, on right bank at village of East Creek, 0.2 mi (0.3 km) downstream from Niagara Mohawk Power Corp. Beardslee powerplant, 1.2 mi (1.9 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of St. Johnsville.

DRAINAGE AREA.--291 mi^2 (754 km^2).

PERIOD OF RECORD.--December 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 335.70 ft (102.321 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Extensive diurnal fluctuation and slight regulation caused by powerplants above station. City of Little Falls diverts about 5 ft^3/s (0.14 m^3/s) for municipal supply.

AVERAGE DISCHARGE.--34 years (1947-80), 681 ft^3/s (19.29 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft^3/s (377 m^3/s) Mar. 14, 1977, gage height, 7.42 ft (2.262 m); minimum, 0.05 ft^3/s (0.001 m^3/s) July 9, 1978, gage height 0.47 ft (0.143 m); minimum gage height, 0.44 ft (0.134 m) July 29, 1977; minimum daily, 0.22 ft^3/s (0.006 m^3/s) July 9, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1945, reached a stage of 9.0 ft (2.74 m), from floodmarks (discharge, 24,000 ft^3/s or 680 m^3/s, from slope-area measurement of peak flow).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,510 ft^3/s (156 m^3/s) Apr. 10, gage height, 5.43 ft (1.655 m); minimum, 1.3 ft^3/s (0.037 m^3/s) May 20, gage height, 0.67 ft (0.204 m); minimum daily, 11.0 ft^3/s (0.312 m^3/s) Aug. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	313	900	221	107	95	2310	661	133	77	207	258
2	201	304	580	399	112	20	2360	461	138	84	713	454
3	524	648	580	354	16	79	2010	553	499	76	592	1190
4	256	423	580	154	140	81	2350	302	477	21	506	1130
5	145	838	380	152	178	173	3330	397	362	47	399	370
6	831	635	380	149	65	174	2500	327	347	20	2350	593
7	831	387	450	216	106	104	2040	360	424	48	1320	16
8	887	520	450	220	113	602	2160	345	602	50	748	173
9	793	450	130	229	17	17	2780	266	707	169	226	144
10	805	450	450	247	19	180	5040	295	562	173	378	146
11	493	660	380	236	180	164	3670	264	329	264	390	151
12	640	680	380	209	128	168	2380	470	175	282	355	142
13	649	840	680	116	113	112	2100	533	233	19	107	81
14	779	520	880	539	143	117	1720	238	243	44	11	19
15	790	380	760	531	141	170	1790	572	179	47	11	675
16	539	260	490	460	19	16	1840	363	522	55	311	643
17	592	130	430	520	19	414	1460	264	222	47	13	194
18	416	64	390	670	19	427	1140	540	221	79	164	17
19	381	520	130	453	87	438	839	447	226	71	164	82
20	439	480	183	195	144	505	809	248	136	107	203	17
21	231	450	144	337	161	1230	976	528	157	306	150	251
22	587	450	142	254	172	4310	662	285	195	553	68	386
23	501	450	344	136	116	3900	456	383	237	1010	72	137
24	455	130	868	241	20	3300	352	239	353	570	12	151
25	512	190	862	198	171	3240	202	247	258	218	73	210
26	472	1200	1190	190	109	2310	607	162	256	242	90	899
27	17	1500	1450	16	116	1720	490	173	48	16	69	723
28	45	1500	642	305	127	1640	803	115	14	113	86	299
29	497	1500	750	298	112	2010	575	178	16	113	101	155
30	333	1400	241	142	---	3260	794	135	75	170	17	257
31	332	---	556	220	---	3080	---	174	---	112	111	---
TOTAL	15183	18272	16772	8607	2970	34056	50545	10525	8346	5203	10017	9963
MEAN	490	609	541	278	102	1099	1685	340	278	168	323	332
MAX	887	1500	1450	670	180	4310	5040	661	707	1010	2350	1190
MIN	17	64	130	16	16	16	202	115	14	16	11	16

CAL YR 1979 TOTAL 285169 MEAN 781 MAX 7450 MIN 17
WTR YR 1980 TOTAL 190459 MEAN 520 MAX 5040 MIN 11

01349000 OTSQUAGO CREEK AT FORT PLAIN, NY

LOCATION.--Lat 42°55'46", long 74°37'35", Montgomery County, Hydrologic Unit 02020004, on left bank 25 ft (8 m) downstream from bridge on State Highway 163 in Fort Plain, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--59.2 mi^2 (153 km^2).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 302.16 ft (92.098 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except for those during winter months which are poor. Occasional diurnal fluctuation at low flow.

AVERAGE DISCHARGE.--31 years, 86.1 ft^3/s (2.438 m^3/s), 19.75 in.yr (502 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,640 ft^3/s (273 m^3/s) July 3, 1974, gage height, 9.67 ft (2.947 m), from rating curve extended above 6,000 ft^3/s (170 m^3/s) on basis of slope-area measurement at gage height 9.24 ft (2.816 m); minimum, 0.6 ft^3/s (0.017 m^3/s) Nov. 30, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2045	3,360	95.2	6.40	1.951
Mar. 22	Unknown	*[a]9,200	261	*[b]9.5	2.90

[a] About.

[b] From highwater marks near gage.

Minimum daily discharge, 4.1 ft^3/s (0.12 m^3/s); minimum gage height, 1.10 ft (0.335 m) Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	8.8	47	38	11	11	223	99	8.0	14	37	5.1
2	7.6	13	40	30	10	11	198	79	14	11	57	5.1
3	8.0	238	34	25	10	10	167	64	30	11	65	9.0
4	9.6	85	34	19	10	10	375	50	14	8.7	54	5.9
5	12	44	30	14	10	10	355	42	9.7	8.7	27	5.9
6	119	32	30	12	11	9.6	184	38	8.0	17	19	8.0
7	34	28	30	11	11	13	144	35	23	9.7	15	5.4
8	19	28	26	11	12	35	132	32	34	10	12	4.8
9	18	24	23	10	13	200	228	29	24	24	10	4.6
10	21	50	22	10	14	110	345	26	22	12	9.0	5.4
11	15	40	22	13	13	80	180	25	16	8.7	9.0	4.6
12	14	29	21	30	12	64	136	25	12	7.4	10	4.3
13	22	24	20	22	12	50	156	27	10	6.5	9.0	4.1
14	22	23	19	23	13	40	130	37	9.0	5.9	8.0	5.4
15	17	21	19	100	14	34	335	31	14	5.6	10	6.5
16	14	22	18	70	13	32	171	24	110	5.9	8.4	5.1
17	12	20	18	62	13	30	114	19	33	11	7.1	5.4
18	11	19	18	55	12	400	95	22	19	9.7	7.4	12
19	10	17	17	51	12	330	82	24	15	6.2	11	7.1
20	9.6	16	17	31	11	250	72	20	23	5.9	8.4	5.6
21	9.2	15	17	25	11	600	69	18	24	6.2	7.1	5.4
22	8.8	14	16	21	11	3500	53	16	16	8.4	6.2	5.4
23	8.4	15	16	19	12	489	48	15	12	9.7	6.2	8.7
24	13	16	60	17	12	493	44	12	10	7.1	5.4	7.1
25	14	97	450	16	13	741	54	12	9.0	5.6	5.1	6.5
26	12	688	179	15	14	263	54	10	8.0	5.1	5.1	42
27	11	621	83	14	13	255	45	9.7	7.4	4.8	5.1	17
28	10	139	50	14	12	292	49	9.4	7.1	4.6	5.1	9.7
29	11	88	49	13	12	895	280	9.0	9.4	11	5.4	7.7
30	10	60	47	12	---	706	150	9.0	21	63	5.1	6.8
31	9.2	---	45	11	---	289	---	8.7	---	68	5.6	---
TOTAL	519.4	2534.8	1517	814	347	10252.6	4668	876.8	571.6	392.4	454.7	235.6
MEAN	16.8	84.5	48.9	26.3	12.0	331	156	28.3	19.1	12.7	14.7	7.85
MAX	119	688	450	100	14	3500	375	99	110	68	65	42
MIN	7.6	8.8	16	10	10	9.6	44	8.7	7.1	4.6	5.1	4.1
CFSM	.28	1.43	.83	.44	.20	5.59	2.64	.48	.32	.22	.25	.13
IN.	.33	1.59	.95	.51	.22	6.44	2.93	.55	.36	.25	.29	.15

CAL YR 1979 TOTAL 33973.8 MEAN 93.1 MAX 1740 MIN 4.1 CFSM 1.57 IN 21.35
WTR YR 1980 TOTAL 23183.9 MEAN 63.3 MAX 3500 MIN 4.1 CFSM 1.07 IN 14.57

01350000 SCHOHARIE CREEK AT PRATTSVILLE, NY

LOCATION.--Lat 42°19'15", long 74°26'10", Greene County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) upstream from bridge on State Highway 23 in Prattsville, 0.2 mi (0.3 km) upstream from Schoharie Reservoir, 0.2 mi (0.3 km) downstream from Huntersfield, and 1.6 mi (2.6 km) downstream from Batavia Kill.

DRAINAGE AREA.--236 mi^2 (611 km^2).

PERIOD OF RECORD.--November 1902 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 351: Drainage area. WSP 1432: 1937-38.

GAGE.--Water-stage recorder. Datum of gage is 1,131.57 ft (344.902 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1915, nonrecording gage, and Oct. 1, 1915 to July 17, 1936, water-stage recorder, at old highway bridge 80 ft (24 m) upstream, and July 18, 1936 to July 15, 1954, water-stage recorder at site 0.2 mi (0.3 km) downstream, all at datum 1.56 ft (0.475 m) lower than present datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--77 years, 464 ft^3/s (13.14 m^3/s), 26.70 in/yr (678 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft^3/s (1,560 m^3/s) Oct. 16, 1955, gage height, 19.14 ft (5.834 m), from rating curve extended above 16,000 ft^3/s (453 m^3/s) on basis of contracted-opening measurement of peak flow; maximum gage height, 19.57 ft (5.965 m) Mar. 5, 1979 (ice jam); minimum daily discharge, 4.8 ft^3/s (0.14 m^3/s) Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft^3/s (120 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 3	2115	4,400	125	6.93	2.112	Mar. 18	0030	ice jam		8.19	2.496
Oct. 6	0100	16,700	473	11.02	3.359	Mar. 21	2045	*45,200	1,280	*16.72	5.096
Nov. 26	2000	20,200	572	11.85	3.612	Apr. 9	2215	10,800	306	9.35	2.850
Jan. 12	1945	ice jam		7.06	2.152	Apr. 29	0630	5,170	146	7.08	2.158
Mar. 8	2030	ice jam		8.17	2.490						

Minimum discharge, 5.6 ft^3/s (0.159 m^3/s) Sept. 25, gage height, 1.61 ft (0.491 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	761	179	624	220	90	70	995	1250	88	347	41	14
2	1290	226	529	210	90	70	878	995	86	205	75	14
3	1370	1880	447	190	90	70	749	812	83	158	108	15
4	1940	1190	409	190	88	60	1030	669	79	122	88	13
5	2830	811	378	210	84	50	1230	570	73	103	59	13
6	6470	665	353	200	80	120	864	513	66	167	48	13
7	1970	580	368	190	76	150	749	535	73	125	41	12
8	1230	515	325	190	72	600	729	464	90	105	35	10
9	1130	455	284	180	70	2000	4430	413	86	125	30	8.6
10	921	466	263	180	68	900	5830	374	96	101	27	9.5
11	729	446	250	200	66	300	2100	342	88	86	27	8.6
12	648	393	242	280	66	140	1340	325	75	75	27	7.8
13	628	359	234	250	64	100	1140	365	70	68	25	7.5
14	526	360	226	240	62	100	963	443	59	61	24	7.3
15	458	335	204	220	60	120	1840	360	56	52	26	8.8
16	416	317	190	210	58	160	1350	312	75	49	25	8.1
17	375	291	150	190	56	250	955	275	70	45	22	7.8
18	346	277	130	180	54	3500	777	263	49	41	21	12
19	320	260	150	170	52	867	669	275	52	38	20	10
20	296	242	170	160	50	714	588	252	49	35	20	9.1
21	277	230	170	140	50	13800	524	233	49	33	19	8.6
22	258	216	230	190	50	12200	464	226	46	33	18	8.0
23	241	207	270	160	48	2780	423	202	43	46	18	7.4
24	328	202	350	130	47	2100	388	176	41	41	17	6.6
25	314	284	566	170	45	1720	356	164	36	34	16	6.0
26	262	5450	605	150	41	1180	338	138	36	30	15	14
27	237	4600	409	130	41	924	320	125	34	28	15	11
28	223	1670	348	110	42	1040	485	113	33	25	14	9.1
29	217	1080	300	100	60	1370	3670	103	68	25	14	8.2
30	202	788	260	94	---	1670	1910	94	777	26	13	8.0
31	189	---	240	90	---	1270	---	88	---	25	16	---
TOTAL	27402	24974	9674	5524	1820	50395	38084	11469	2626	2454	964	296.0
MEAN	884	832	312	178	62.8	1626	1269	370	87.5	79.2	31.1	9.87
MAX	6470	5450	624	280	90	13800	5830	1250	777	347	108	15
MIN	189	179	130	90	41	50	320	88	33	25	13	6.0
CFSM	3.75	3.53	1.32	.75	.27	6.89	5.38	1.57	.37	.34	.13	.04
IN.	4.32	3.94	1.52	.87	.29	7.94	6.00	1.81	.41	.39	.15	.05

CAL YR 1979 TOTAL 257750.0 MEAN 706 MAX 9350 MIN 46 CFSM 2.99 IN 40.63
WTR YR 1980 TOTAL 175682.0 MEAN 480 MAX 13800 MIN 6.0 CFSM 2.03 IN 27.69

01350100 SCHOHARIE RESERVOIR NEAR GRAND GORGE, NY

LOCATION.--Lat 42°21'21", long 74°26'42", Schoharie County, Hydrologic Unit 02020005, in Shandaken Tunnel intake house on Intake Road, 1.6 mi (2.6 km) north of junction of Intake Road and State Highway 23, 2.5 mi (4.0 km) upstream from Gilboa Dam, and 2.6 mi (4.2 km) east of Grand Gorge.

DRAINAGE AREA.--314 mi^2 (813 km^2).

PERIOD OF RECORD.--January 1973 to current year. Monthly contents only published as "at Gilboa" for September 1928 to December 1972.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

REMARKS.--Reservoir is formed by masonry and earth dam. Storage began July 24, 1926. Usable capacity 19,583 mil gal (74.12 hm^3) between minimum operating level, elevation, 1,050.00 ft (320.040 m), and crest of spillway, elevation, 1,130.00 ft (344.424 m). Dead storage below elevation 1,050.00 ft (320.040 m), 1,968 mil gal (7.449 hm^3). Figures given herein represent usable contents. Reservoir impounds water except for periods of spilling, for diversion through Shandaken Tunnel into Esopus Creek to Ashokan Reservoir, for New York City water supply.

COOPERATION.--Capacity table furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,135.17 ft (346.000 m) Oct. 16, 1955, contents, 23,566 mil gal (89.20 hm^3); minimum observed (after initial filling), 1,062.00 ft (323.698 m) Aug. 20, 1970, contents, 1,520 mil gal (5.753 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,134.78 ft (345.881 m) Mar. 21, contents, 21,440 mil gal (81.15 hm^3); minimum, 1,063.26 ft (324.082 m) Sept. 29, contents, 1,711 mil gal (6.48 hm^3).

Capacity table (elevation, in feet, and usable contents in million gallons).

1,063.0	1,672	1,120.0	16,100
1,080.0	4,969	1,133.0	20,700

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1112.38	1130.15	1130.39	1130.17	1130.09	1130.09	1130.43	1130.80	1123.61	1110.61	1095.20	1079.49
2	1114.91	1130.14	1130.33	1130.18	1130.08	1130.09	1130.39	1130.69	1122.99	1110.91	1094.81	1078.92
3	1116.61	1130.85	1130.27	1130.16	1130.07	1130.06	1130.34	1130.60	1122.49	1111.03	1094.50	1078.41
4	1120.54	1130.60	1130.26	1130.11	1130.09	1130.07	1130.43	1130.55	1122.00	1111.05	1094.18	1077.91
5	1123.36	1130.53	1130.23	1130.14	1130.06	1130.06	1130.49	1130.50	1121.35	1111.01	1093.85	1077.44
6	1130.77	1130.51	1130.25	1130.11	1130.06	1129.95	1130.38	1130.47	1120.13	1111.05	1093.40	1076.99
7	1130.60	1130.37	1130.24	1130.10	1130.08	1129.24	1130.32	1130.53	1118.87	1111.07	1092.94	1076.54
8	1130.42	1130.33	1130.26	1130.11	1130.09	1128.94	1130.37	1130.49	1117.60	1110.97	1092.46	1076.10
9	1130.39	1130.30	1130.26	1130.08	1130.10	1129.86	1130.96	1130.45	1116.45	1110.94	1091.95	1075.66
10	1130.34	1130.31	1130.24	1130.07	1130.10	1129.70	1131.63	1130.42	1115.93	1110.84	1091.44	1075.25
11	1130.29	1130.33	1130.22	1130.10	1130.10	1129.31	1130.91	1130.39	1115.50	1110.68	1090.94	1074.86
12	1130.28	1130.28	1130.21	1130.28	1130.11	1128.70	1130.70	1130.39	1115.14	1110.46	1090.44	1074.34
13	1130.30	1130.26	1130.19	1130.19	1130.08	1127.96	1130.70	1130.40	1114.76	1110.20	1089.95	1072.80
14	1130.26	1130.26	1130.19	1130.21	1130.07	1127.28	1130.63	1130.47	1114.35	1109.93	1089.46	1070.75
15	1130.23	1130.25	1130.17	1130.21	1130.06	1126.45	1130.94	1130.42	1113.91	1109.61	1088.99	1069.75
16	1130.22	1130.24	1130.17	1130.18	1130.09	1125.68	1130.88	1130.34	1113.58	1109.08	1088.52	1069.10
17	1130.18	1130.25	1130.18	1130.16	1130.10	1125.01	1130.69	1130.18	1113.22	1107.54	1088.05	1068.40
18	1130.17	1130.24	1130.15	1130.18	1130.10	1128.51	1130.58	1130.11	1112.82	1105.82	1087.56	1067.80
19	1130.16	1130.21	1130.15	1130.13	1130.08	1130.29	1130.52	1130.08	1112.50	1104.08	1087.03	1067.10
20	1130.16	1130.19	1130.16	1130.09	1130.06	1130.07	1130.47	1129.83	1112.19	1102.32	1086.48	1066.55
21	1130.15	1130.20	1130.14	1130.10	1130.08	1131.34	1130.46	1129.48	1111.88	1100.78	1085.93	1066.00
22	1130.16	1130.20	1130.15	1130.15	1130.08	1132.44	1130.43	1129.17	1111.56	1100.17	1085.39	1065.60
23	1130.14	1130.18	1130.19	1130.15	1130.08	1130.88	1130.40	1128.78	1111.23	1099.71	1084.86	1065.15
24	1130.16	1130.18	1130.22	1130.10	1130.08	1130.71	1130.39	1128.34	1110.88	1099.26	1084.34	1064.70
25	1130.30	1130.23	1130.31	1130.12	1130.06	1130.72	1130.36	1127.85	1110.52	1098.77	1083.82	1064.30
26	1130.21	1130.97	1130.38	1130.14	1130.04	1130.50	1130.38	1127.31	1110.14	1098.26	1083.20	1063.95
27	1130.20	1131.20	1130.28	1130.13	1130.00	1130.40	1130.37	1126.75	1109.72	1097.74	1082.58	1063.75
28	1130.19	1130.65	1130.25	1130.12	1130.02	1130.43	1130.44	1126.15	1109.28	1097.21	1081.97	1063.55
29	1130.18	1130.51	1130.23	1130.11	1130.04	1130.53	1131.43	1125.52	1108.91	1096.69	1081.36	1063.35
30	1130.17	1130.43	1130.22	1130.08	---	1130.62	1131.08	1124.88	1109.57	1096.20	1080.70	1063.28
31	1130.16	---	1130.21	1130.10	---	1130.52	---	1124.24	---	1095.71	1080.09	---
MEAN	1128.21	1130.38	1130.23	1130.14	1130.07	1129.56	1130.62	1129.24	1114.77	1105.47	1088.27	1070.59
MAX	1130.77	1131.20	1130.39	1130.28	1130.11	1132.44	1131.63	1130.80	1123.61	1111.07	1095.20	1079.49
MIN	1112.38	1130.14	1130.14	1130.07	1130.00	1125.01	1130.32	1124.24	1108.91	1095.71	1080.09	1063.28
*	19,645	19,754	19,669	19,602	19,599	19,793	20,014	17,594	12,768	8,947	5,012	1,717
**	+295	+5.63	-4.23	-3.35	-0.16	+9.68	+11.4	-121	-249	-191	-196	-170

CAL YR 1979 MEAN 1125.69 MAX 1132.37 MIN 1095.11 * +0.08
WTR YR 1980 MEAN 1118.14 MAX 1132.44 MIN 1063.26 ** -50.8

* Contents, in millions of gallons, on last day of month.
** Change in contents, equivalent in cubic feet per second.

NOTE.--Elevations for Oct. 27 to Nov. 7, Aug. 5, 6, Sept. 10-19, 29, 30 are instantaneous wire-weight readings furnished by Department of Environmental Protection, City of New York. Elevations for Sept. 20-28 were estimated.

01350101 SCHOHARIE CREEK AT GILBOA, NY

LOCATION.--Lat 42°23'50", long 74°27'03", Schoharie County, Hydrologic Unit 02020005, on left bank, 200 ft (61 m) upstream from bridge on County Highway 322, 0.2 mi (0.3 km) west of village of Gilboa, 0.4 mi (0.6 km) downstream from dam on Schoharie Reservoir, and 0.8 mi (1.3 km) upstream from the Platter Kill.

DRAINAGE AREA.--314 mi^2 (813 km^2).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 939.56 ft (286.378 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Entire flow, runoff from 314 mi^2 (813 km^2), except for periods of spill, Oct. 6 to Mar. 5 and Mar. 9 to May 19, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of city of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,500 ft^3/s (1,320 m^3/s) Mar. 21, 1980 determined by flow over dam computations at Schoharie Reservoir dam, gage height, 28.6 ft (8.72 m) from floodmarks; minimum daily, 0.04 ft^3/s (0.001 m^3/s) on many days, June to October 1976, and Sept. 11-13, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 32,000 ft^3/s (906 m^3/s) Mar. 18, 1936, from information furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46,500 ft^3/s (1,320 m^3/s) Mar. 21, as explained above, gage height, 28.6 ft (8.72 m) from floodmarks; minimum daily, 0.04 ft^3/s (0.001 m^3/s) Sept. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	244	1070	323	181	78	1340	1570	.72	.67	.20	.12
2	1.2	286	930	334	152	71	1170	1260	.67	.45	.20	.10
3	1.0	2060	827	281	107	68	997	1050	.62	.45	.36	.13
4	1.2	1500	757	196	98	49	1330	885	.56	.41	.26	.10
5	1.8	1020	725	226	100	49	1650	739	.56	.45	.18	.07
6	4310	841	664	194	96	22	1170	627	.51	.72	.13	.07
7	2270	743	686	190	91	1.0	1020	603	.67	.51	.12	.06
8	1400	677	627	205	86	2.9	885	595	.62	.62	.09	.05
9	1270	615	545	196	75	2.9	3900	538	.56	.77	.09	.05
10	1140	611	519	181	66	1.3	7120	505	.62	.56	.08	.05
11	984	607	508	211	60	2.2	2610	467	.51	.45	.08	.04
12	882	527	487	686	59	.72	1680	447	.45	.36	.07	.04
13	867	484	487	371	57	.62	1460	480	.45	.36	.08	.04
14	749	477	470	357	57	.77	1240	591	.45	.33	.08	.05
15	666	453	447	374	56	.67	2030	530	.51	.33	.08	.05
16	606	419	419	312	81	.62	1790	434	.72	.33	.08	.06
17	553	391	519	276	71	1.8	1290	203	.51	.33	.08	.08
18	510	379	359	299	86	498	1070	119	.41	.33	.07	.18
19	486	357	340	283	62	607	935	69	.41	.29	.07	.12
20	445	337	354	256	64	196	827	13	.45	.29	.07	.09
21	419	318	334	171	68	11000	734	4.0	.41	.26	.07	.09
22	378	304	377	219	79	15300	652	.90	.36	.26	.07	.08
23	350	296	409	233	77	3690	599	.90	.36	.23	.07	.07
24	380	299	477	149	78	2720	564	.90	.36	.23	.06	.06
25	420	391	699	162	60	2200	530	.80	.36	.20	.06	.06
26	350	4130	827	165	40	2030	501	.80	.36	.18	.06	.12
27	310	6900	568	162	10	1210	487	.80	.36	.18	.06	.10
28	290	2440	460	162	20	1340	538	.72	.41	.18	.06	.10
29	280	1650	434	144	40	1780	4090	.67	.82	.29	.06	.09
30	263	1270	419	129	---	2190	2470	.67	1.1	.45	.05	.09
31	251	---	371	147	---	1700	---	.67	---	.23	.15	---
TOTAL	20835.3	31026	17115	7594	2177	46813.50	46679	11736.83	15.88	11.70	3.24	2.41
MEAN	672	1034	552	245	75.1	1510	1556	379	.53	.38	.10	.080
MAX	4310	6900	1070	686	181	15300	7120	1570	1.1	.77	.36	.18
MIN	1.0	244	334	129	10	.62	487	.67	.36	.18	.05	.04

CAL YR 1979 TOTAL 284168.09 MEAN 779 MAX 10000 MIN .29
WTR YR 1980 TOTAL 184009.86 MEAN 503 MAX 15300 MIN .04

01350120 PLATTER KILL AT GILBOA, NY

LOCATION.--Lat 42°24'18", long 74°26'36", Schoharie County, Hydrologic Unit 02020005, on right bank, 190 ft (58 m) upstream from culvert on County Highway 17, 0.5 mi (0.8 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Gilboa.

DRAINAGE AREA.--11.1 mi^2 (28.7 km^2).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1969-73. January 1975 to current year.

GAGE.--Water-stage recorder. Concrete control since Nov. 12, 1976. Altitude of gage is 1,110 ft (338 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 690 ft^3/s (19.5 m^3/s) Oct. 17, 1977, gage height, 4.54 ft (1.384 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Oct. 6, 1976; minimum gage height, 0.12 ft (0.037 m) Sept. 8, 11, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s (4.25 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 7	0230	ice jam		2.97	0.905	Mar. 22	0530	*371		*4.01	1.222

Minimum discharge, 0.84 ft^3/s (0.024 m^3/s) Sept. 10, 11, 12, 23, 24, gage height 0.92 ft (0.280 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.7	20	8.6	1.9	2.0	49	24	4.8	4.8	2.8	.94
2	13	13	19	8.0	1.8	1.9	43	21	5.0	3.8	3.1	1.5
3	11	48	17	7.2	1.8	1.9	38	18	4.6	3.1	3.1	3.0
4	13	34	16	6.6	1.8	1.9	42	17	4.4	2.6	2.1	2.0
5	22	26	15	6.0	1.8	1.9	44	16	4.2	3.4	1.7	1.6
6	51	22	15	5.6	1.8	2.1	37	16	3.7	3.5	1.5	1.4
7	28	20	15	5.4	1.8	2.5	30	20	5.9	2.6	1.4	1.2
8	21	18	13	5.2	1.9	4.0	27	16	5.2	3.7	1.4	1.1
9	25	17	12	5.0	1.9	7.0	28	14	5.4	3.6	1.3	1.0
10	22	17	12	4.8	2.0	15	39	13	5.4	2.9	1.3	.94
11	17	16	12	5.4	2.1	9.0	34	12	4.5	2.7	1.4	.91
12	15	14	11	7.0	2.1	7.0	27	12	4.0	2.5	1.5	.89
13	14	13	11	6.0	2.1	5.7	24	12	3.6	2.3	1.4	.90
14	13	13	11	5.6	2.2	5.2	24	12	3.3	2.2	1.3	1.0
15	11	12	10	5.4	2.3	5.2	30	11	3.5	2.0	1.5	1.1
16	11	12	10	5.0	2.4	4.8	25	9.7	4.7	1.9	1.3	.99
17	10	11	9.0	5.0	2.4	25	20	9.0	3.6	1.8	1.2	1.6
18	9.5	11	8.0	4.9	2.4	79	18	8.7	3.4	1.7	1.1	2.0
19	9.0	11	7.4	4.8	2.4	21	16	8.7	3.2	1.7	1.2	1.1
20	8.6	10	7.4	4.5	2.5	18	15	8.0	3.4	1.7	1.2	1.0
21	8.4	9.7	7.4	5.0	2.6	70	14	7.5	3.1	1.6	1.1	1.0
22	8.2	9.6	8.0	4.4	2.6	243	12	7.2	2.8	1.8	1.2	1.0
23	8.0	9.3	8.6	4.2	2.6	98	12	6.9	2.6	2.0	1.1	.94
24	10	10	10	4.0	2.6	67	12	6.1	2.3	1.6	1.0	.89
25	9.3	12	15	5.0	2.5	70	11	5.9	2.2	1.4	1.0	.94
26	8.2	24	14	4.0	2.4	44	11	5.2	2.1	1.4	.96	1.7
27	8.0	47	11	3.5	2.3	39	11	5.0	2.0	1.4	.94	1.0
28	7.7	31	9.7	2.9	2.2	39	12	5.2	2.6	1.3	.90	1.0
29	7.5	27	9.7	2.6	2.1	53	42	5.4	7.1	2.9	.90	1.0
30	7.4	23	9.3	2.4	---	78	33	5.0	7.2	3.3	.94	1.0
31	7.1	---	8.7	2.2	---	59	---	4.8	---	1.8	1.1	---
TOTAL	424.9	547.3	362.2	156.2	63.3	1080.1	780	342.3	119.8	75.0	43.94	36.64
MEAN	13.7	18.2	11.7	5.04	2.18	34.8	26.0	11.0	3.99	2.42	1.42	1.22
MAX	51	48	20	8.6	2.6	243	49	24	7.2	4.8	3.1	3.0
MIN	7.1	6.7	7.4	2.2	1.8	1.9	11	4.8	2.0	1.3	.90	.89
CFSM	1.23	1.64	1.05	.45	.20	3.14	2.34	.99	.36	.22	.13	.11
IN.	1.42	1.83	1.21	.52	.21	3.62	2.61	1.15	.40	.25	.15	.12

CAL YR 1979 TOTAL 7670.70 MEAN 21.0 MAX 345 MIN 2.3 CFSM 1.89 IN 25.70
WTR YR 1980 TOTAL 4031.68 MEAN 11.0 MAX 243 MIN .89 CFSM .99 IN 13.51

01350140 MINE KILL NEAR NORTH BLENHEIM, NY

LOCATION.--Lat 42°25'44", long 74°28'24", Schoharie County, Hydrologic Unit 02020005, on left bank 200 ft (61 m) upstream from bridge on State Highway 30, 0.6 mi (1.0 km) upstream from mouth, and 3.0 mi (4.8 km) southwest of North Blenheim.

DRAINAGE AREA.--16.3 mi^2 (42.2 km^2).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1969-74. December 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 23, 1975. Altitude of gage is 1,060 ft (323 m), from topographic map.

REMARKS.--Records fair except those for winter periods and above 500 ft^3/s (14.2 m^3/s), which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) Mar. 14, 1977, gage height, 3.41 ft (1.039 m); minimum, 0.10 ft^3/s (0.003 m^3/s) Aug. 27-30, 1980, gage height, 0.49 ft (0.149 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft^3/s (15.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 17	2330	496	14.0	2.47	0.753
Mar. 21	1900	*915	25.9	*2.74	0.835

Minimum discharge, 0.10 ft^3/s (0.003 m^3/s) Aug. 27-30, gage height, 0.49 ft (0.149 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	6.3	21	7.0	1.1	.90	67	55	2.0	15	1.6	1.8
2	29	21	19	6.2	1.0	.90	57	48	2.0	6.3	11	1.0
3	29	137	14	5.6	.90	.90	48	40	2.2	4.5	5.0	2.2
4	34	55	15	5.2	.90	1.0	71	32	2.2	3.0	2.5	2.2
5	46	40	13	5.0	.90	1.5	67	28	1.8	2.7	1.5	1.5
6	96	31	13	5.0	.94	2.0	48	28	1.5	12	1.2	1.2
7	36	25	13	5.0	.94	3.0	41	28	3.3	4.5	.75	.88
8	26	22	10	5.0	.96	15	36	22	4.1	7.6	.64	.46
9	36	19	6.3	5.0	.98	35	53	19	4.1	14	.46	.31
10	31	19	7.6	5.0	1.0	25	82	16	7.0	7.0	.15	.31
11	23	16	7.6	5.2	1.0	20	51	15	4.1	4.1	.15	.25
12	21	14	7.6	8.0	1.1	20	43	15	3.0	3.0	.31	.13
13	23	13	6.3	6.0	1.2	20	41	15	2.2	2.2	.46	.12
14	19	12	6.3	4.5	1.3	20	43	26	2.0	1.8	.38	.12
15	16	12	5.6	4.0	1.4	30	80	18	1.8	1.5	.31	.12
16	15	11	6.3	3.5	1.5	60	51	13	4.5	1.3	.25	.13
17	13	8.9	8.2	3.2	1.5	100	40	11	3.0	1.2	.19	.14
18	13	10	7.0	3.0	1.5	220	34	8.9	2.0	1.0	.15	1.2
19	12	8.9	8.0	2.8	1.6	69	29	9.6	1.6	.75	.14	.64
20	11	8.2	7.8	2.6	1.7	55	26	9.6	2.0	.75	.14	.25
21	10	7.0	7.8	2.5	1.8	335	22	8.2	2.5	.75	.14	.19
22	9.6	6.3	8.0	2.5	1.9	389	19	8.9	2.2	1.5	.13	.15
23	8.9	6.3	10	2.5	2.0	187	16	7.0	1.6	3.0	.13	.15
24	13	6.3	21	3.0	1.6	163	14	5.6	1.3	2.7	.13	.14
25	12	14	32	6.0	1.4	134	12	4.5	1.2	2.0	.13	.13
26	8.9	101	19	4.0	1.2	73	12	3.7	1.0	.88	.11	.64
27	8.2	112	12	2.5	1.0	67	16	3.3	.88	.64	.11	1.0
28	8.2	49	9.6	2.0	.90	69	28	2.7	.88	.55	.10	.46
29	8.2	38	9.0	1.8	.90	132	147	2.5	16	.55	.10	.25
30	7.6	28	8.4	1.5	---	126	71	2.2	36	.75	.11	.19
31	6.3	---	7.6	1.3	---	82	---	2.0	---	.75	1.6	---
TOTAL	657.9	857.2	347.0	126.4	36.12	2456.20	1365	507.7	119.96	108.27	30.07	18.26
MEAN	21.2	28.6	11.2	4.08	1.25	79.2	45.5	16.4	4.00	3.49	.97	.61
MAX	96	137	32	8.0	2.0	389	147	55	36	15	11	2.2
MIN	6.3	6.3	5.6	1.3	.90	.90	12	2.0	.88	.55	.10	.12
CFSM	1.30	1.76	.69	.25	.08	4.86	2.79	1.01	.25	.21	.06	.04
IN.	1.50	1.96	.79	.29	.08	5.61	3.12	1.16	.27	.25	.07	.04

CAL YR 1979 TOTAL 12095.77 MEAN 33.1 MAX 560 MIN .46 CFSM 2.03 IN 27.60
WTR YR 1980 TOTAL 6630.08 MEAN 18.1 MAX 389 MIN .10 CFSM 1.11 IN 15.13

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°27'57", long 74°27'45", Schoharie County, Hydrologic Unit 02020005, on left bank 2300 ft (701 m) upstream from West Kill, and 1.2 mi (1.9 km) upstream from bridge on State Highway 30 in North Blenheim. Water-quality sampling site at discharge station.

DRAINAGE AREA.--359 mi^3 (930 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional measurements, water years 1969-70. October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (244 m), from topographic map. Prior to Oct. 1, 1971, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project immediately upstream from gage. Entire flow, runoff from 314 mi^2 (813 km^2), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--10 years, 554 ft^3/s (15.69 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,900 ft^3/s (1,210 m^3/s) Mar. 21, 1980, gage height, 14.72 ft (4.487 m) from floodmark, from rating curve extended above 14,000 ft^3/s (396 m^3/s); no flow Oct. 21-28, 1972, Sept. 12-14, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42,900 ft^3/s (1,210 m^3/s) Mar. 21, gage height, 14.72 ft (4.487 m) from floodmark, from rating curve extended above 14,000 ft^3/s (396 m^3/s); minimum daily, 4.6 ft^3/s (0.13 m^3/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	216	910	320	70	57	1510	1600	9.1	12	7.9	7.1
2	126	308	822	350	59	56	1370	1200	9.1	8.2	7.3	8.2
3	50	2350	640	230	44	54	1190	960	9.4	7.9	7.1	7.9
4	41	1700	540	170	63	32	1450	860	8.8	7.6	7.1	7.9
5	72	1240	617	120	80	21	1830	700	8.5	7.9	6.8	7.1
6	3820	980	489	120	93	63	1340	640	8.5	8.8	7.1	8.2
7	2230	880	514	250	57	18	1180	700	9.1	8.8	6.8	8.2
8	1390	740	660	250	48	228	1090	640	9.1	9.7	6.8	7.3
9	1330	652	480	180	41	186	3050	623	10	9.1	6.8	5.2
10	1190	677	440	180	62	44	6610	600	9.1	7.9	7.1	5.6
11	988	670	380	160	96	42	2540	600	8.5	8.2	7.3	5.2
12	894	545	410	787	39	34	1780	499	8.2	7.6	7.3	5.0
13	910	494	410	294	53	25	1790	561	7.8	7.3	7.1	4.8
14	708	556	360	308	62	19	2160	702	7.6	7.3	7.1	4.8
15	594	460	340	437	63	19	1450	664	7.4	7.3	7.1	5.2
16	566	479	350	291	65	16	1580	357	10	7.3	7.1	5.0
17	479	370	390	271	56	50	1370	308	8.8	7.1	7.1	5.4
18	489	400	270	252	82	900	1130	138	7.8	6.8	7.9	5.4
19	304	430	200	291	54	800	972	180	7.4	6.8	7.6	5.2
20	433	330	260	214	44	300	832	34	8.2	7.3	7.6	5.2
21	451	350	240	190	97	7180	779	11	7.9	7.9	6.3	5.0
22	297	240	200	198	48	18000	633	10	8.5	7.1	6.5	5.0
23	312	380	330	203	80	5200	601	10	8.8	7.1	7.1	5.4
24	410	300	380	195	94	2660	533	10	8.2	7.3	8.2	5.2
25	406	420	540	96	103	2840	529	9.0	8.5	7.3	7.6	5.0
26	322	2000	900	124	75	1840	470	9.0	7.0	6.8	6.3	5.2
27	304	4440	580	180	63	1360	400	9.2	6.6	6.8	6.5	4.6
28	294	2300	410	214	61	1570	450	9.2	6.6	6.8	7.6	5.0
29	312	1580	500	174	65	2040	3500	10	9.0	7.3	7.6	5.0
30	252	1180	350	102	---	2400	2300	10	17	9.7	7.6	4.8
31	222	---	410	82	---	1900	---	9.7	---	6.6	7.6	---
TOTAL	20233	27667	14322	7233	1917	49954	46419	12673.1	260.5	241.6	222.9	174.1
MEAN	653	922	462	233	66.1	1611	1547	409	8.68	7.79	7.19	5.80
MAX	3820	4440	910	787	103	18000	6610	1600	17	12	8.2	8.2
MIN	37	216	200	82	39	16	400	9.0	6.6	6.6	6.3	4.6

CAL YR 1979 TOTAL 275876.2 MEAN 756 MAX 10600 MIN 3.5
WTR YR 1980 TOTAL 181317.2 MEAN 495 MAX 18000 MIN 4.6

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971-72 (a), 1975-76 (d).
NUTRIENT DATA: 1971 (a), 1975-76 (d).
BIOLOGICAL DATA:
Bacteria--1975-76 (d).
SEDIMENT DATA: 1975-76 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1971 to current year.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record Oct. 1-26, June 5-30.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1973-76, 80), 33.5°C Aug. 7, 1973; minimum, freezing point on many days during winter periods, except water years 1978-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 29.0° July 21, Sept. 2; minimum 1.0°C on many days during February and March.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	11.5	10.0	11.0	7.5	7.5	7.5	3.5	3.0	3.0
2	---	---	---	11.5	11.0	11.0	7.5	6.5	7.0	3.0	3.0	3.0
3	---	---	---	11.0	10.5	11.0	6.5	6.5	6.5	3.5	2.5	3.0
4	---	---	---	10.5	10.5	10.5	6.5	6.0	6.0	3.0	2.5	2.5
5	---	---	---	10.5	10.0	10.0	6.0	5.5	6.0	2.5	2.0	2.0
6	---	---	---	10.0	10.0	10.0	6.0	5.5	6.0	3.0	1.5	2.0
7	---	---	---	10.0	9.5	10.0	6.0	5.5	6.0	2.5	2.0	2.5
8	---	---	---	10.0	9.5	9.5	6.0	5.5	5.5	2.5	2.0	2.0
9	---	---	---	9.5	9.5	9.5	5.5	5.0	5.0	2.5	1.5	2.0
10	---	---	---	9.5	9.5	9.5	5.5	5.0	5.0	2.5	1.5	2.0
11	---	---	---	9.5	9.5	9.5	5.5	5.0	5.0	3.0	1.5	2.5
12	---	---	---	9.5	9.0	9.5	6.0	5.0	5.5	2.5	2.0	2.0
13	---	---	---	9.5	9.0	9.0	5.0	4.5	5.0	2.5	2.0	2.0
14	---	---	---	9.0	9.0	9.0	5.0	4.5	5.0	2.5	2.0	2.0
15	---	---	---	9.0	8.5	8.5	5.0	4.5	4.5	2.5	2.0	2.5
16	---	---	---	8.5	8.0	8.5	5.0	4.0	4.5	2.5	2.0	2.0
17	---	---	---	8.5	7.5	8.0	5.0	4.0	4.0	2.5	2.0	2.0
18	---	---	---	8.5	8.0	8.0	4.0	3.0	3.5	2.5	2.0	2.5
19	---	---	---	8.0	7.5	8.0	3.5	3.0	3.0	2.5	2.0	2.5
20	---	---	---	8.5	7.5	8.0	3.5	2.5	3.0	2.5	2.0	2.0
21	---	---	---	8.5	7.5	8.0	3.5	2.5	3.0	2.5	1.5	2.0
22	---	---	---	8.0	7.5	8.0	3.5	2.5	3.0	2.0	1.5	2.0
23	---	---	---	8.5	8.0	8.0	3.0	3.0	3.0	2.0	1.5	2.0
24	---	---	---	9.0	8.5	8.5	3.0	3.0	3.0	2.0	1.5	1.5
25	---	---	---	9.5	8.5	9.0	4.0	3.5	3.5	2.0	1.5	1.5
26	---	---	---	9.5	8.5	9.0	3.5	3.5	3.5	2.0	1.5	1.5
27	12.5	11.5	12.0	10.0	9.0	9.5	3.5	3.5	3.5	2.5	1.5	1.5
28	11.5	11.0	11.0	9.0	9.0	9.0	3.5	3.0	3.5	2.0	1.5	1.5
29	11.0	10.5	10.5	9.0	8.5	8.5	3.5	3.5	3.5	1.5	1.5	1.5
30	11.0	10.5	11.0	8.5	7.5	8.0	4.0	3.0	3.5	1.5	1.5	1.5
31	11.5	10.5	11.0	---	---	---	3.5	3.0	3.5	1.5	1.5	1.5
MONTH				11.5	7.5	9.0	7.5	2.5	4.5	3.5	1.5	2.0

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	1.5	1.5	2.5	1.0	1.5	4.0	3.0	3.5	9.5	9.0	9.0
2	1.5	1.5	1.5	3.0	1.5	1.5	3.5	3.5	3.5	10.0	9.5	9.5
3	1.5	1.5	1.5	3.0	1.5	2.0	4.0	3.5	4.0	10.5	10.0	10.5
4	1.5	1.0	1.5	5.0	1.5	2.5	4.5	4.0	4.0	10.5	10.0	10.5
5	1.5	1.0	1.5	3.0	1.5	2.5	4.5	4.0	4.5	11.5	10.0	10.5
6	1.5	1.0	1.5	3.5	1.5	2.0	4.5	4.0	4.5	12.0	11.0	11.5
7	2.0	1.0	1.5	6.5	1.5	3.5	5.0	4.5	4.5	12.5	11.0	11.5
8	2.0	1.0	1.5	3.0	1.5	2.5	5.0	4.5	5.0	12.0	11.5	11.5
9	2.0	1.0	1.5	3.5	1.5	2.5	5.5	5.0	5.0	12.0	11.0	11.5
10	2.0	1.0	1.5	4.5	1.5	3.0	5.0	4.5	5.0	12.5	11.5	12.0
11	2.0	1.0	1.5	3.5	1.5	2.5	5.5	5.0	5.0	12.0	11.5	12.0
12	2.0	1.0	1.5	3.5	1.5	2.0	5.5	5.0	5.5	12.5	11.5	12.0
13	2.0	1.0	1.5	2.0	1.5	1.5	6.0	5.5	5.5	12.5	12.0	12.0
14	3.0	1.0	1.5	1.5	1.5	1.5	6.0	6.0	6.0	12.5	12.0	12.0
15	2.5	1.0	1.5	3.0	1.5	2.0	6.5	6.0	6.0	12.5	12.0	12.0
16	1.0	1.0	1.0	4.5	1.5	2.5	6.5	6.0	6.5	13.5	11.0	12.5
17	1.5	1.0	1.5	3.0	1.5	2.5	6.5	6.0	6.0	13.0	10.5	12.0
18	2.5	1.0	1.5	3.0	2.5	2.5	6.5	6.0	6.0	12.5	11.5	12.0
19	4.0	1.0	1.5	3.0	2.5	2.5	7.0	6.0	6.5	13.0	12.0	12.5
20	4.5	1.0	2.0	4.5	2.5	3.0	7.0	6.5	6.5	17.5	11.5	13.5
21	2.5	1.5	2.0	3.0	3.0	3.0	7.0	6.5	7.0	14.5	12.5	13.5
22	2.0	1.0	1.5	3.0	2.5	2.5	7.5	6.5	7.0	20.5	11.5	16.0
23	2.5	1.5	2.0	3.0	2.5	2.5	8.0	7.0	7.5	22.5	14.0	18.0
24	2.5	1.5	2.0	3.0	2.5	3.0	9.0	7.5	8.0	22.5	15.5	19.0
25	3.0	1.5	2.0	3.0	2.5	3.0	8.5	7.5	8.0	22.5	15.5	18.5
26	2.5	1.0	1.5	3.0	2.5	2.5	9.0	8.0	8.0	20.5	13.5	16.5
27	2.0	1.5	1.5	3.0	2.5	3.0	8.5	8.0	8.0	20.5	12.5	16.0
28	3.0	1.0	1.5	3.5	3.0	3.0	8.5	8.5	8.5	21.0	13.0	15.5
29	2.0	1.0	1.5	3.0	3.0	3.0	8.5	8.5	8.5	22.0	12.5	17.0
30	---	---	---	3.5	3.0	3.0	9.0	8.5	8.5	21.0	14.0	17.5
31	---	---	---	3.5	3.0	3.0	---	---	---	22.0	16.0	19.0
MONTH	4.5	1.0	1.5	6.5	1.0	2.5	9.0	3.0	6.0	22.5	9.0	13.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	17.0	19.5	23.0	15.5	19.5	26.0	20.0	22.0	26.5	21.5	24.0
2	21.0	17.0	19.0	19.0	17.0	18.0	26.0	20.0	22.5	29.0	22.0	24.5
3	21.0	17.0	18.5	24.0	16.5	20.0	25.0	20.5	22.5	25.5	20.5	22.5
4	20.0	16.0	17.5	25.5	18.0	21.5	26.5	20.5	23.0	27.0	19.0	22.0
5	---	---	---	22.5	19.5	21.0	27.0	20.5	23.5	23.0	20.5	21.5
6	---	---	---	23.5	18.0	20.0	26.5	22.0	24.0	27.0	19.5	22.0
7	---	---	---	23.5	16.0	19.5	28.0	20.0	24.0	24.0	19.0	21.0
8	---	---	---	22.5	17.5	19.5	28.5	22.0	24.5	22.5	17.5	19.5
9	---	---	---	23.0	17.5	20.0	28.0	22.5	24.5	22.5	15.5	19.0
10	---	---	---	26.0	17.5	21.5	27.0	21.0	23.0	23.0	17.0	19.0
11	---	---	---	25.5	18.5	21.5	22.5	21.0	21.5	24.5	15.0	19.5
12	---	---	---	24.5	18.5	21.0	23.5	20.5	21.5	23.0	17.5	18.0
13	---	---	---	24.5	17.5	20.5	24.5	19.0	21.5	22.5	18.5	20.5
14	---	---	---	26.0	17.5	21.5	22.0	19.5	20.5	23.5	20.0	21.5
15	---	---	---	24.0	19.0	22.0	26.0	20.0	22.0	21.0	17.0	19.0
16	---	---	---	27.5	20.5	23.5	22.5	18.0	20.0	23.0	16.0	18.5
17	---	---	---	27.0	21.5	23.5	24.5	16.5	20.5	21.5	17.5	19.5
18	---	---	---	28.0	20.0	23.5	23.5	18.0	20.5	20.0	16.0	18.5
19	---	---	---	25.5	19.5	22.5	24.5	19.5	21.5	22.5	15.0	18.0
20	---	---	---	26.5	20.5	23.5	23.5	20.5	21.5	22.0	16.0	19.0
21	---	---	---	29.0	21.5	25.0	23.0	19.0	20.5	24.5	20.0	22.0
22	---	---	---	26.0	22.0	23.5	22.0	19.0	20.5	27.0	21.0	23.5
23	---	---	---	25.0	20.5	22.5	25.5	19.0	21.5	25.5	19.0	22.5
24	---	---	---	25.0	19.0	21.5	26.5	19.0	22.5	23.0	16.5	19.0
25	---	---	---	26.5	18.0	22.0	26.0	19.5	22.5	17.0	15.0	16.0
26	---	---	---	24.5	19.0	22.0	26.0	19.0	22.5	19.5	14.5	16.5
27	---	---	---	25.5	20.0	22.5	26.5	20.0	22.5	19.0	13.0	14.5
28	---	---	---	25.0	20.0	22.5	24.0	20.5	22.0	19.0	12.0	14.5
29	---	---	---	23.5	20.5	21.5	23.5	20.0	21.5	19.5	11.5	15.0
30	---	---	---	26.0	19.5	22.0	25.5	20.0	22.5	20.0	14.0	16.5
31	---	---	---	26.5	19.5	22.5	26.0	20.5	23.0	---	---	---
MONTH				29.0	15.5	21.5	28.5	16.5	22.0	29.0	11.5	19.5

01350200 WEST KILL AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°28'07", long 74°27'34", Schoharie County, Hydrologic Unit 02020005, on left bank 75 ft (23 m) upstream from highway bridge on State Highway 30, in North Blenheim, 100 ft (30 m) downstream from Mill Creek and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--44.6 mi^2 (115.5 km^2).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1970-72, July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 810 ft (247 m), from topographic map.

REMARKS.--Records fair, except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft^3/s (343 m^3/s) Oct. 18, 1975, gage height, 5.91 ft (1.801 m) from rating curve extended above 2,700 ft^3/s (76 m^3/s); maximum gage height, 7.82 ft (2.384 m) Oct. 17, 1977; minimum discharge, 0.53 ft^3/s (0.015 m^3/s) Aug. 28-30, 1980; minimum gage height, 0.68 ft (0.207 m) July 25, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s (56.6 m^3/s):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	2100	*4,760	135	*6.44	1.963

Minimum discharge, 0.53 ft^3/s (0.015 m^3/s) Aug. 28-30; minimum gage height, 1.74 ft (0.530 m) Aug. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	15	80	40	7.0	6.0	265	116	11	24	4.7	1.8
2	43	29	72	36	7.0	6.0	232	103	12	15	10	1.6
3	38	278	63	32	7.0	6.0	199	89	16	13	6.0	12
4	53	112	60	30	7.0	7.0	248	77	13	10	5.2	4.4
5	61	84	57	28	7.0	8.0	244	68	10	13	4.3	2.6
6	211	72	56	25	7.0	9.0	177	64	8.6	27	3.0	2.2
7	72	65	54	23	7.2	15	140	58	19	13	2.6	1.7
8	57	60	48	21	7.4	60	130	51	20	17	2.1	1.3
9	78	53	42	18	7.6	130	171	46	18	21	1.7	1.2
10	68	57	42	18	8.0	80	236	42	18	14	1.3	1.1
11	54	52	41	23	8.2	60	162	38	14	11	1.3	.98
12	51	46	41	30	8.4	40	137	37	11	8.6	1.8	.90
13	50	43	41	25	8.6	30	140	57	9.0	6.6	1.9	.80
14	43	43	39	21	8.8	30	142	68	7.3	5.3	1.6	.79
15	40	40	36	19	9.0	30	248	52	6.6	4.5	1.8	.79
16	37	39	35	18	9.0	60	168	41	23	4.0	1.8	.79
17	34	36	35	17	9.4	100	137	35	12	3.7	1.4	.92
18	31	37	34	16	9.6	458	120	32	8.1	3.3	1.1	3.0
19	30	34	33	15	10	192	105	35	6.2	2.8	1.0	2.3
20	29	33	33	15	10	259	93	32	7.7	2.8	.97	1.5
21	27	31	34	15	10	1350	86	30	9.0	2.6	.95	1.3
22	23	30	35	15	11	1890	72	29	6.6	2.4	.89	1.1
23	22	29	60	15	13	551	65	24	5.0	2.4	.84	1.0
24	30	30	80	17	11	433	58	21	4.5	2.4	.77	.88
25	29	42	97	25	9.0	421	54	18	4.0	2.1	.71	.79
26	23	189	67	18	8.0	244	52	16	3.1	1.7	.62	4.4
27	21	330	54	15	7.0	217	47	14	2.8	1.6	.58	4.2
28	20	146	50	13	6.4	228	55	13	2.9	1.4	.56	2.2
29	20	89	48	11	6.0	466	273	12	32	2.1	.53	1.7
30	19	93	45	9.0	---	558	140	11	54	2.1	.65	1.4
31	17	---	42	7.4	---	346	---	11	---	4.3	2.3	---
TOTAL	1359	2237	1554	630.4	244.6	8290.0	4396	1340	374.4	244.7	64.97	61.64
MEAN	43.8	74.6	50.1	20.3	8.43	267	147	43.2	12.5	7.89	2.10	2.05
MAX	211	330	97	40	13	1890	273	116	54	27	10	12
MIN	17	15	33	7.4	6.0	6.0	47	11	2.8	1.4	.53	.79
CFSM	.98	1.67	1.12	.46	.19	5.99	3.30	.97	.28	.18	.05	.05
IN.	1.13	1.87	1.30	.53	.20	6.91	3.67	1.12	.31	.20	.05	.05

CAL YR 1979 TOTAL 35732.10 MEAN 97.9 MAX 1980 MIN 2.1 CFSM 2.20 IN 29.80
WTR YR 1980 TOTAL 20796.71 MEAN 56.8 MAX 1890 MIN .53 CFSM 1.27 IN 17.35

01350355 SCHOHARIE CREEK AT BREAKABEEN, NY

LOCATION.--Lat 42°32'10", long 74°24'40", Schoharie County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) downstream from bridge on State Highway 30, 0.9 mi (1.4 km) north of Breakabeen, and 1.1 mi (1.8 km) downstream from Keyser Kill.

DRAINAGE AREA.--443 mi^2 (1,147 km^2).

PERIOD OF RECORD.--July 1975 to current year.

REVISED RECORDS.--WDR NY-79-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213.4 m), from topographic map.

REMARKS.--Records poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi^2 (813 km^2), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,500 ft^3/s (1,230 m^3/s) Mar. 21, 1980, gage height, 18.34 ft (5.590 m) from floodmarks; minimum, 5.0 ft^3/s (0.14 m^3/s) Sept. 17, 1980, gage height, 1.85 ft (0.564 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43,500 ft^3/s (1,230 m^3/s) Mar. 21, gage height, 18.34 ft (5.590 m), from floodmarks; minimum daily, 5.8 ft^3/s (0.16 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	250	1220	384	120	80	1970	1810	33	63	13	10
2	189	355	1110	436	100	70	1750	1360	36	39	21	14
3	131	2870	906	283	68	70	1540	1110	40	33	17	20
4	161	2170	824	238	77	60	1740	997	37	28	15	20
5	199	1490	840	168	106	44	2280	821	32	26	14	15
6	4900	1170	710	163	142	91	1690	740	29	48	12	14
7	2600	1070	747	296	85	60	1430	800	42	36	10	12
8	1520	892	755	291	65	425	1290	720	48	32	8.6	12
9	1380	797	527	220	63	552	2830	610	45	49	7.6	9.6
10	1250	817	540	224	69	174	8120	602	46	36	6.6	7.0
11	994	802	497	198	132	168	3010	571	39	30	8.3	7.0
12	897	653	486	856	59	110	2110	502	33	26	8.6	6.9
13	901	614	521	384	63	96	1790	543	29	20	8.7	5.8
14	709	643	436	364	87	84	1550	700	27	18	8.3	6.2
15	615	547	415	474	80	93	2320	645	26	17	9.4	5.9
16	570	577	420	374	80	128	2140	400	48	16	9.6	5.9
17	485	440	533	287	84	183	1620	335	37	15	9.6	6.3
18	493	489	331	291	117	1650	1320	174	28	14	9.3	10
19	339	511	254	304	104	1440	1100	242	25	12	8.9	9.9
20	417	401	309	250	62	702	1010	116	25	13	8.9	8.9
21	460	433	287	227	112	9680	915	77	28	14	8.6	7.8
22	328	303	238	204	75	22000	747	77	25	14	7.6	6.8
23	333	448	431	190	96	6210	695	68	24	12	8.0	5.9
24	445	365	527	170	121	3580	616	60	20	12	7.6	6.1
25	435	518	725	157	121	3810	622	54	20	11	7.3	6.5
26	364	2780	1270	147	106	2480	526	48	19	14	7.3	11
27	345	9230	740	140	100	2070	497	44	18	12	7.0	13
28	331	2790	503	140	94	1990	558	41	18	13	7.6	11
29	369	2460	666	130	90	2680	4070	39	28	15	8.0	9.5
30	304	2040	458	120	---	3300	2790	38	101	21	9.3	8.2
31	275	---	527	110	---	2480	---	36	---	15	12	---
TOTAL	22823	38925	18753	8220	2678	66560	54646	14380	1006	724	304.7	292.2
MEAN	736	1298	605	265	92.3	2147	1822	464	33.5	23.4	9.83	9.74
MAX	4900	9230	1270	856	142	22000	8120	1810	101	63	21	20
MIN	84	250	238	110	59	44	497	36	18	11	6.6	5.8

CAL YR 1979 TOTAL 363042.0 MEAN 995 MAX 14900 MIN 13
WTR YR 1980 TOTAL 229311.9 MEAN 627 MAX 22000 MIN 5.8

01351500 SCHOHARIE CREEK AT BURTONSVILLE, NY

LOCATION.--Lat 42°48'00", long 74°15'48", Schenectady County, Hydrologic Unit 02020005, on right bank 0.4 mi (0.6 km) south of Burtonsville, 2.7 mi (4.3 km) north of Esperance, and 13.5 mi (21.7 km) upstream from mouth.

DRAINAGE AREA.--883 mi^2 (2,287 km^2).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.98 ft (154.832 m) National Geodetic Vertical Datum of 1929, unadjusted.

REMARKS.--Records fair except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi^2 (813 km^2), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--41 years, 1,017 ft^3/s (28.80 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,500 ft^3/s (2,170 m^3/s) Oct. 16, 1955, gage height, 12.39 ft (3.776 m); minimum, 2.4 ft^3/s (0.068 m^3/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of March 1936 and September 1938 reached stages of 10.5 (3.20 m) and 10.2 ft (3.11 m), respectively, from information furnished by local resident. However, flood of October 1903 is known to have reached a higher stage than the 1936 or 1938 flood.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 54,700 ft^3/s (1,550 m^3/s) Mar. 22, gage height, 10.15 ft (3.094 m); minimum, 16 ft^3/s (0.45 m^3/s) Sept. 13, 14, gage height, 0.56 ft (0.171 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	337	1910	560	250	230	4100	3490	132	431	44	24
2	187	347	1580	520	240	230	3460	2750	129	250	50	26
3	302	3810	1360	500	220	230	2900	2290	165	198	61	31
4	593	4300	1240	410	210	230	3110	1840	185	165	66	42
5	516	2440	1090	380	190	250	4700	1510	162	136	6	37
6	6330	1880	1050	350	180	350	3310	1330	137	220	56	34
7	4570	1640	1040	340	180	600	2650	1400	131	218	50	31
8	2610	1470	964	360	190	3160	2340	1290	180	157	48	25
9	1920	1330	814	400	190	3540	2380	1100	186	162	42	22
10	2030	1280	753	450	190	1220	10500	964	179	162	36	22
11	1620	1220	694	540	200	700	6020	859	163	136	33	20
12	1450	1100	640	900	210	350	3680	799	144	169	34	18
13	1390	1000	693	1430	210	250	3030	875	123	187	34	17
14	1240	946	656	723	190	210	2680	1130	108	132	33	17
15	996	964	590	893	180	200	3780	1100	101	104	32	22
16	956	858	551	999	180	200	3990	928	216	91	31	21
17	850	786	686	537	180	200	2850	593	249	84	30	23
18	720	656	586	494	180	2000	2300	524	162	77	30	31
19	679	693	500	427	200	3500	1940	425	120	69	30	40
20	500	710	500	462	230	2920	1660	454	107	66	28	33
21	677	556	500	338	260	7150	1560	319	103	65	26	31
22	584	573	500	330	270	40300	1330	289	101	57	25	29
23	462	505	520	320	270	14400	1120	272	92	61	24	26
24	542	573	887	310	280	7890	1000	250	82	59	23	24
25	630	602	1210	300	260	9480	929	227	74	51	22	23
26	599	980	1820	300	240	5280	894	204	66	47	20	33
27	501	11900	1390	290	240	3710	836	184	60	43	19	52
28	488	5240	936	270	240	3600	836	170	54	39	18	44
29	475	3190	820	260	230	5610	4490	157	69	41	18	36
30	413	2370	700	250	---	9270	5540	147	547	44	23	34
31	379	---	600	250	---	5680	---	138	---	40	22	---
TOTAL	35306	54256	27780	14893	6290	132940	89915	28008	4327	3761	1069	868
MEAN	1139	1809	896	480	217	4288	2997	903	144	121	34.5	28.9
MAX	6330	11900	1910	1430	280	40300	10500	3490	547	431	66	52
MIN	97	337	500	250	180	200	836	138	54	39	18	17

CAL YR 1979 TOTAL 618628 MEAN 1695 MAX 28100 MIN 34
WTR YR 1980 TOTAL 399413 MEAN 1091 MAX 40300 MIN 17

01354490 MOHAWK RIVER AT SCHENECTADY, NY

LOCATION.--Lat 42°49'06", long 73°57'04", Schenectady County, Hydrologic Unit 02020004, at new (1977) Schenectady-Scotia bridge, 0.5 mi (0.8 km) upstream from railroad bridge, and 1.0 mi (1.6 km) upstream from Collins Creek.

DRAINAGE AREA.--3,302 mi² (8,552 km²).

PERIOD OF RECORD.--Water years 1969 to current year.
CHEMICAL DATA: 1969 (d), 1970-72 (e), 1973 (d), 1974 (e), 1975 (d), 1976-77 (b), 1978-80 (d).
MINOR ELEMENTS DATA: 1972 (c), 1973 (b), 1974-75 (d), 1976-77 (c), 1978-79 (d), 1980 (c).
ORGANIC DATA: OC--1974 (c), 1975 (d), 1976-77 (c), 1978-79 (d).
NUTRIENT DATA: 1969 (d), 1970-74 (e), 1975 (d), 1976-77 (c), 1978-80 (d).
BIOLOGICAL DATA:
Bacteria--1977 (c), 1978-80 (d).

REMARKS.--Water-discharge data are based on records for 01357499 diversion from Mohawk River at Crescent Dam, and 01357500 Mohawk River at Cohoes. Prior to January 1977, sampling site was 0.2 mi (0.3 km) upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT									
23...	1000	2350	255	7.5	13.0	11.1	105	15	K30
NOV									
07...	1000	23800	210	7.5	10.0	11.7	104	18	470
DEC									
12...	0800	4250	240	7.6	3.0	13.7	99	3	3000
JAN									
04...	1000	3230	190	7.5	.0	14.1	104	19	K1700
MAR									
18...	0830	3410	365	7.3	.0	13.8	96	12	K100
APR									
07...	1100	14000	180	7.2	5.0	13.4	105	--	K400
MAY									
12...	1100	3520	250	7.3	15.0	11.0	109	19	K60
JUN									
09...	1000	3270	272	7.7	16.0	9.1	83	16	K240
JUL									
14...	1030	1630	295	8.1	24.5	8.2	102	17	K36
AUG									
11...	1100	1550	303	7.7	26.0	6.5	81	22	K14
SEP									
02...	1300	1120	316	7.8	25.0	6.6	81	22	140

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
OCT									
23...	14	.53	1.4	1.9	.040	2	0	0	.00
NOV									
07...	12	.41	.50	.91	.040	0	0	20	.00
DEC									
12...	20	.44	.89	1.3	.050	2	0	10	.00
JAN									
04...	8	.83	.76	1.6	.040	2	2	10	.01
MAR									
18...	7	1.1	.73	1.8	.060	3	0	20	.00
APR									
07...	--	--	--	--	--	--	--	--	--
MAY									
12...	8	.63	.54	1.2	.030	1	0	10	.00
JUN									
09...	8	--	.92	--	.050	--	--	--	.01
JUL									
14...	6	--	.59	--	.040	--	--	--	.00
AUG									
11...	6	--	.28	--	.030	4	1	10	.00
SEP									
02...	20	--	.50	--	.290	8	2	10	.00

K Results based on colony count outside the acceptable range (non-ideal colony count).

01357500 MOHAWK RIVER AT COHOES, NY

LOCATION.--Lat 42°47'07", long 73°42'29", Albany County, Hydrologic Unit 02020004, on right bank at Niagara Mohawk Power Corp. School Street powerplant in Cohoes, and 2.0 mi (3.2 km) upstream from mouth. Water-quality sampling site at bridge on State Highway 32, 0.7 mi (1.1 km) downstream from discharge station.

DRAINAGE AREA.--3,456 mi² (8,951 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1917 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to July 17, 1925, published as "at Crescent Dam".

REVISED RECORDS.--WSP 741: Drainage area. WSP 1302: 1919-23 (M).

GAGE.--Water-stage recorder. Datum of gage is 49.13 ft (14.975 m) National Geodetic Vertical Datum of 1929. Dec. 1, 1917, to July 16, 1925, water-stage recorder at site 1.7 mi (2.74 km) upstream at Crescent Dam at datum 130.87 ft (39.889 m) higher. July 17 to Oct. 19, 1925, powerplant gage at present site.

REMARKS.--Records fair. Total flow of Mohawk River equals flow published at Cohoes which includes small diversion for Cohoes water supply plus flow diverted at Cresent Dam to Barge Canal through Lock 6. Prior to 1925 records published as total flow. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

COOPERATION.--Diversions through Barge Canal at Lock 6 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--7 years (1919-25), 5,820 ft³/s (164.8 m³/s), includes diversion at Lock 6; 55 years (1926-80), 5,734 ft³/s (162.4 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft³/s (4,050 m³/s) Mar. 6, 1964, result of release from ice jam, gage height, 23.15 ft (7.056 m), from rating curve extended above 100,000 ft³/s (2,830 m³/s); minimum, 6 ft³/s (0.17 m³/s) Sept. 18, 1941, gage height, 3.40 ft (1.036 m); minimum daily, 23 ft³/s (0.65 m³/s) Aug. 24, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 41,000 ft³/s (1,160 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 22	1815	93,700	2,654	20.79	6.337

Minimum discharge, 180 ft³/s (5.10 m³/s) Aug. 30, gage height, 5.04 ft (1.536 m); minimum daily, 604 ft³/s (17.11 m³/s) Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1750	2530	5240	3860	2100	1340	17400	8320	1540	1710	1570	848
2	1570	2670	5740	3620	2090	837	14200	4890	1320	2700	1480	1020
3	1950	5850	4800	3510	2030	1330	12400	6500	2130	2340	2280	2150
4	2220	11000	6970	3230	2030	1040	11200	5420	3050	1510	1820	2930
5	2230	6290	7990	2760	2080	1250	16200	4520	2360	1340	1630	2540
6	6730	5570	9660	2510	2020	1040	16200	4700	1690	1390	2580	1580
7	9450	4940	6350	2340	1960	1250	14000	4540	1970	1450	3060	1710
8	5460	3940	4360	2530	1970	2650	12300	4260	3940	2210	2410	1510
9	4010	4090	4190	2600	2030	9360	11300	4000	3140	1380	1330	1090
10	3740	3740	3840	2760	1980	6650	18400	2680	3750	1650	924	981
11	4010	5240	4190	2590	1940	4480	27300	3140	2810	1530	1440	1020
12	3720	4960	4190	2750	2050	3920	21300	3400	2280	1550	1300	1010
13	3600	4060	4000	3230	2070	2760	16700	3340	1620	1490	1140	1050
14	3740	3880	4300	3470	1980	1990	14400	3490	1650	1500	1260	1000
15	3460	3410	4990	3410	1880	1770	14200	3740	1990	1400	1380	1190
16	3150	3150	4590	5490	1660	1750	15900	3470	3710	1030	1130	1700
17	2590	3210	3980	5770	1600	2350	13900	2910	2750	1100	896	1610
18	2500	3430	3510	4960	1520	3410	10100	2290	2390	1150	1250	2140
19	2440	3150	2910	4770	1480	10300	6500	2980	2020	1150	1070	1470
20	2300	3340	2860	4390	1330	12500	7230	3250	1180	1060	1080	1010
21	2190	3380	2810	4150	1340	16300	6290	2980	1380	1210	1120	1310
22	2300	3360	3000	3680	1640	79100	4130	2980	1510	2120	1030	1290
23	2250	3320	2890	3550	2030	49000	4360	2280	2150	3700	1180	1150
24	2700	3230	3120	2980	1690	27500	2070	2360	2200	2960	846	1200
25	2840	3100	5010	2310	1530	27100	3980	2030	1730	2400	937	1450
26	3070	4820	10300	2200	1600	22300	4190	1880	1610	804	679	2070
27	2930	23700	8870	2180	1680	15600	4450	1730	1370	1250	788	2750
28	2390	16400	6350	2470	1510	13400	4360	1480	1010	1240	940	1370
29	2480	9900	5240	2350	1480	14500	5820	1490	841	1000	757	1160
30	2630	7200	4700	2270	---	28700	13500	1250	2050	1300	604	1230
31	2570	---	4130	2150	---	23100	---	1530	---	1670	778	---
TOTAL	98970	166860	155080	100840	52300	388577	344280	103830	63141	50294	40689	44539
MEAN	3193	5562	5003	3253	1803	12530	11480	3349	2105	1622	1313	1485
MAX	9450	23700	10300	5770	2100	79100	27300	8320	3940	3700	3060	2930
MIN	1570	2530	2810	2150	1330	837	2070	1250	841	804	604	848

CAL YR 1979 TOTAL 2335853 MEAN 6400 MAX 63200 MIN 780
WTR YR 1980 TOTAL 1609400 MEAN 4397 MAX 79100 MIN 604

01357500 MOHAWK RIVER AT COHOES, NY--Continued

(01357499) Diversion, in cubic feet per second, from Mohawk River at Crescent Dam, NY, through Barge Canal at lock 6, water year October 1979 to September 1980

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	102	72	3.0	3.0	3.0	3.0	104	122	158	152	152
2	120	78	72	3.0	3.0	3.0	3.0	128	116	128	134	104
3	120	84	90	3.0	3.0	3.0	3.0	116	128	140	140	122
4	126	90	72	3.0	3.0	3.0	3.0	110	122	152	134	146
5	120	84	84	3.0	3.0	3.0	3.0	110	134	146	122	140
6	102	96	72	3.0	3.0	3.0	3.0	116	128	152	122	104
7	114	90	58	3.0	3.0	3.0	3.0	128	116	152	140	134
8	108	102	58	3.0	3.0	3.0	3.0	116	122	152	140	122
9	90	370	58	3.0	3.0	3.0	3.0	116	128	140	146	116
10	96	90	58	3.0	3.0	3.0	92	122	140	146	146	116
11	120	84	58	3.0	3.0	3.0	92	116	116	122	110	116
12	96	84	58	3.0	3.0	3.0	92	122	128	128	128	140
13	102	102	58	3.0	3.0	3.0	92	122	146	134	116	134
14	102	84	58	3.0	3.0	3.0	92	116	134	140	140	140
15	114	78	58	3.0	3.0	3.0	92	140	134	128	122	122
16	96	84	58	3.0	3.0	3.0	92	110	104	122	176	110
17	114	96	58	3.0	3.0	3.0	92	104	110	110	128	140
18	90	96	58	3.0	3.0	3.0	92	122	134	134	122	128
19	96	84	58	3.0	3.0	3.0	92	116	134	152	158	110
20	120	96	58	3.0	3.0	3.0	92	116	122	128	128	128
21	102	78	3.0	3.0	3.0	3.0	92	146	110	152	122	110
22	114	84	3.0	3.0	3.0	3.0	92	152	128	134	134	134
23	108	78	3.0	3.0	3.0	3.0	92	158	188	146	140	134
24	126	90	3.0	3.0	3.0	3.0	92	116	146	152	134	110
25	96	78	3.0	3.0	3.0	3.0	92	140	128	146	140	116
26	90	84	3.0	3.0	3.0	3.0	92	128	110	140	116	140
27	84	72	3.0	3.0	3.0	3.0	92	116	152	140	116	128
28	90	84	3.0	3.0	3.0	3.0	98	134	116	134	146	116
29	108	84	3.0	3.0	3.0	3.0	98	110	122	128	134	122
30	108	96	3.0	3.0	---	3.0	98	128	158	128	140	128
31	96	---	3.0	3.0	---	3.0	---	116	---	134	128	---
TOTAL	3282	2902	1307.0	93.0	87.0	93.0	1977.0	3794	3876	4298	4154	3762
MEAN	106	96.7	42.2	3.00	3.00	3.00	65.9	122	129	139	134	125
MAX	126	370	90	3.0	3.0	3.0	98	158	188	158	176	152
MIN	84	72	3.0	3.0	3.0	3.0	3.0	104	104	110	110	104

CAL YR 1979	TOTAL 26751.0	MEAN 73.3	MAX 562	MIN 3.0
WTR YR 1980	TOTAL 29625.0	MEAN 80.9	MAX 370	MIN 3.0

01357500 MOHAWK RIVER AT COHOES, NY

REGULATION
(see Reservoirs in Hudson River Basin)

Delta Dam.
Hinckley Reservoir.
Schoharie Reservoir.

DIVERSIONS
(see Reservoirs in Hudson River Basin)

From Chenango River basin through Oriskany Creek Feeder.

From (and occasionally into) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica.

From Black River basin through Black River Canal during navigation period.

Into Esopus Creek from Schoharie Reservoir through Shandaken Tunnel for New York City water supply.

01358000 HUDSON RIVER AT GREEN ISLAND, NY

REGULATION

Great Sacandaga Lake at Conklingville (see station 01323500).
Indian Lake near Indian Lake (see station 01314500).
Mohawk River regulation listed under Mohawk River at Cohoes.

DIVERSIONS

Mohawk River diversions listed under Mohawk River at Cohoes.

Into St. Lawrence River basin through:
Glens Falls feeder at Dunham Basin (see station 01327500).
Bond Creek at Dunham Basin (see station 01328000).
Champlain (Barge) Canal (see station 01327500).

From St. Lawrence River basin through summit level of Champlain (Barge) Canal at Dunham Basin

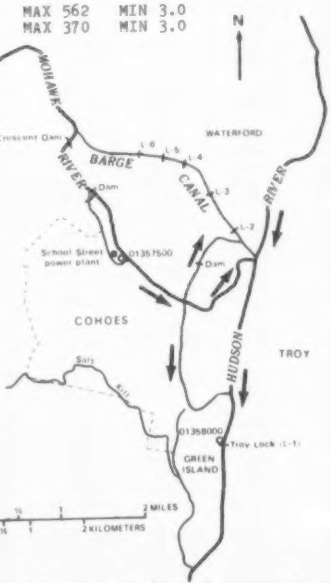


Figure 5.--Gaging stations and diversions near mouth of Mohawk River.

01358000 HUDSON RIVER AT GREEN ISLAND, NY

(National stream-quality accounting network station)
(National pesticide network station)
(National radiochemical network station)

LOCATION.--Lat 42°45'08", long 73°41'22", Albany County, Hydrologic Unit 02020003, on right bank at Green Island, just upstream from Troy lock and dam, and 0.5 mi (0.8 km) downstream from 5th branch Mohawk River. Water-quality sampling site at bridge on State Highway 7, 1.7 mi (2.7 km) downstream from discharge station.

DRAINAGE AREA.--8,090 mi² (20,953 km²), approximately (including that above site of former auxiliary gage).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.31 ft (0.094 m) below National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). From July 1, 1946 to Mar. 12, 1962 auxiliary water-stage recorder on bypass channel at datum 10.59 ft (3.228 m) higher.

REMARKS.--Records fair above 15,000 ft³/s (424.8 m³/s), and poor below. Records include flow over spillway, estimates of flow through lock, and flow through powerplant. Powerplant, located on right bank just downstream from gage, was inoperative from Nov. 20, 1960 to Feb. 23, 1971. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

AVERAGE DISCHARGE.--34 years, 13,820 ft³/s (391.4 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181,000 ft³/s (5,130 m³/s) Dec. 31, 1948, gage height, 27.05 ft (8.245 m), from high-water mark in gage well; maximum daily, 152,000 ft³/s (4,305 m³/s) Mar. 14, 1977; minimum daily, 882 ft³/s (25.0 m³/s) Sept. 2, 1968; minimum gage height 13.92 ft (4.243 m) Sept. 2, 1946.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1936, reached a stage of 29.48 ft (8.986 m) at gage on opposite bank, from information by Corps of Engineers (discharge, 215,000 ft³/s or 6,090 m³/s). Flood of Mar. 28, 1913, prior to construction of Sacandaga Reservoir and Troy lock and dam, reached a stage about 0.2 ft (0.06 m) higher upstream from former dam near same site. Downstream from dams, flood in 1913 was about 3.3 ft (1.01 m) higher than flood in 1936, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 123,000 ft³/s (3,483 m³/s) Mar. 22, gage height, 23.62 ft (7.199 m); minimum daily, 2,100 ft³/s (59.5 m³/s) Sept. 1; minimum gage height, 14.65 ft (4.465 m) Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5560	9260	22000	12600	5240	4820	33600	20000	4170	6520	5130	2100
2	8610	9350	20200	11900	5000	3430	28400	14900	3730	7060	4610	2400
3	9040	13800	16600	11700	4080	2670	26000	15700	5860	7430	5530	5700
4	11400	22800	20500	11000	2830	3810	24900	14300	9050	4490	4300	6600
5	10200	14200	20100	9020	4850	4140	33700	11800	8790	3500	5100	5900
6	15700	14400	23400	11400	4860	4570	33500	11400	8790	4390	6510	4800
7	20700	14500	19600	8000	4760	4960	29000	11400	9130	3910	7720	4100
8	16100	12900	17600	8800	4740	8860	25100	11000	10400	6050	6690	3000
9	13900	13000	15700	8280	5120	20900	24700	10300	8870	5200	4840	4000
10	14400	12400	12300	8640	5210	14700	43200	9210	10400	5940	4080	3900
11	12700	15700	12200	8100	3990	11500	65000	8440	9990	5860	3720	3500
12	12900	13800	13200	8790	5080	10200	40900	9200	9000	5720	4570	3600
13	12600	13900	13300	9720	5080	7920	39000	10700	7710	4800	4500	4000
14	13000	13800	13600	8170	5120	5460	33600	11300	6980	3430	4410	3400
15	10100	12700	14200	10300	5200	5870	32600	11400	6130	5150	4520	2700
16	11600	12400	13200	12900	4410	4500	37000	10900	8280	4480	4690	4900
17	11300	12400	13800	12300	3970	4430	32900	9360	8370	4650	3980	4580
18	10400	12600	12300	11600	2740	17500	26000	7980	6680	4540	3390	5790
19	10400	10500	10300	11300	3970	27100	20400	8380	6720	3660	4280	5350
20	9870	11600	9540	10100	4180	23500	19800	9970	4860	4400	4600	4190
21	9570	12300	8850	8210	4940	27200	17800	8680	5360	4380	4310	3990
22	8290	12000	9960	8650	4840	97900	14100	10200	4650	5640	4260	2730
23	8830	12000	9990	8160	5400	78000	13700	8540	5040	7910	4260	3660
24	10100	12000	10700	7230	4470	46800	10000	8480	6770	6980	4280	3740
25	9930	11600	13900	6800	3390	44200	10900	7210	5860	6420	3380	4080
26	10400	12800	23000	6570	4060	39500	11600	5280	5140	3930	3730	4930
27	11000	47300	20300	5320	4580	29800	12300	5160	5180	3900	3680	6080
28	9450	47000	16900	5400	4810	25300	12800	6240	4210	3200	3210	3600
29	7610	33400	15700	6840	4360	26000	14700	4040	3630	3810	4050	3050
30	8250	26200	15100	6580	---	46500	25600	4140	4140	4540	5160	4720
31	9480	---	12700	5990	---	41800	---	4340	---	5590	5000	---
TOTAL	343390	492610	470740	280370	131280	693840	792800	299950	203890	157480	142490	125090
MEAN	11080	16420	15190	9044	4527	22380	26430	9676	6796	5080	4596	4170
MAX	20700	47300	23400	12900	5400	97900	65000	20000	10400	7910	7720	6600
MIN	5560	9260	8850	5320	2740	2670	10000	4040	3630	3200	3210	2100

CAL YR 1979 TOTAL 6175600 MEAN 16920 MAX 112000 MIN 2350
WTR YR 1980 TOTAL 4133930 MEAN 11290 MAX 97900 MIN 2100

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.
CHEMICAL DATA: 1963 (a), 1964-65 (e), 1966-77 (d), 1978 (c), 1979-80 (d).
MINOR ELEMENTS DATA: 1970-71 (a); 1972-73, 1975-79 (b), 1980 (c).
RADIOCHEMICAL DATA: 1968-71 (c), 1973-75 (a), 1976 (d), 1977 (a),1978 (b), 1979-80 (a).
PESTICIDE DATA: 1976-77 (b), 1978 (a), 1979 (c), 1980 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c), 1976-77 (b), 1978 (a), 1979 (c), 1980 (d).
PCB--1978 (a), 1979 (b), 1980 (a).
NUTRIENT DATA: 1968 (b), 1969-76 (d), 1977-79 (c), 1980 (d).
BIOLOGICAL DATA:
Bacteria--1971 (a), 1973-74 (d), 1975 (a), 1976-78 (c), 1979-80 (d).
Phytoplankton--1975 (a), 1976-77 (c), 1978 (b), 1979-80 (c).
Periphyton--1976-77 (b), 1978 (a), 1979-80 (b).
SEDIMENT DATA: 1975 (b), 1976 (d), 1977 (b), 1978 (c), 1979-80 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1965, once-daily measurements, unpublished.
pH: October 1964 to September 1965, once-daily measurements, unpublished.
WATER TEMPERATURES: April 1947 to September 1954, once-daily measurements, unpublished; October 1954 to current year.

REMARKS.--Daily water-temperature measurements (at 0800 hours) made at Troy lock and dam. Prior to October 1968 sampling site at old bridge on State Highway 7 about 100 ft (33 m) upstream, and between April 1971 and September 1973 sampling site at former bridge on road between Green Island and Troy at Starbuck Island. No record Dec. 11 to Apr. 23 (stream frozen during winter period).

COOPERATION.--Water-temperature record furnished by the Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily (water years 1947-76, 1978-80), 29.0°C Aug. 8, 9, 1949; minimum daily, freezing point on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 28.0°C June 26-28; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT											
03...	1030	9040	191	7.4	16.0	3.0	9.6	97	K21	290	69
NOV											
06...	1100	14400	199	7.4	6.0	5.0	--	--	2000	290	74
DEC											
11...	1100	12200	163	7.2	4.0	2.0	14.4	107	310	73	64
JAN											
03...	1200	11700	153	6.8	.0	1.5	15.2	104	420	K20	61
MAR											
19...	1000	27100	242	7.3	1.5	50	15.0	105	K650	700	72
24...	1130	46800	150	7.1	2.5	36	15.2	109	K1400	630	51
APR											
24...	1100	10000	151	6.8	9.0	3.2	12.0	103	K20	K60	55
MAY											
13...	1100	10700	176	7.1	15.0	3.5	9.6	95	210	K40	68
JUN											
10...	1200	10400	194	7.5	17.0	.60	9.4	90	1200	K100	64
JUL											
15...	1200	5130	205	8.3	25.0	2.1	9.1	114	1000	42	77
AUG											
12...	1330	4570	175	6.9	26.0	1.3	7.6	90	K1700	46	66
SEP											
03...	1200	5700	184	6.3	25.5	.60	7.4	92	2200	110	75

K Results based on colony count outside the acceptable range (non-ideal colony count).

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT											
03...	19	21	4.0	9.1	1.1	50	19	11	.1	4.2	113
NOV											
06...	25	23	4.1	8.7	1.3	49	20	15	.1	4.5	119
DEC											
11...	24	20	3.5	6.2	.8	40	16	8.3	.1	5.2	104
JAN											
03...	23	19	3.4	5.5	.7	38	15	7.7	.1	5.5	87
MAR											
19...	23	22	4.1	12	2.6	49	20	18	.1	3.6	143
24...	12	16	2.6	4.6	1.5	39	10	7.4	.1	3.5	80
APR											
24...	19	17	3.1	4.9	.7	36	14	8.5	.1	4.8	81
MAY											
13...	24	21	3.7	7.5	.8	44	19	10	.1	4.0	102
JUN											
10...	8	19	4.0	11	.9	56	19	12	.1	3.3	120
JUL											
15...	20	24	4.1	8.3	1.1	57	16	11	.1	1.8	107
AUG											
12...	21	21	3.4	9.4	1.2	45	20	12	.2	2.8	120
SEP											
03...	28	24	3.6	9.3	1.1	47	24	11	.1	2.5	123

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)
OCT											
03...	102	.56	.43	.030	.050	.40	.38	.43	.43	.99	.86
NOV											
06...	108	.46	.45	.180	.140	.32	.35	.50	.49	.96	.94
DEC											
11...	86	.48	.45	.110	.100	.37	.27	.48	.37	.96	.82
JAN											
03...	82	.51	.51	.140	.140	.62	.33	.76	.47	1.3	.98
MAR											
19...	115	.87	.72	.560	.510	.54	.59	1.1	1.1	2.0	1.8
24...	72	.59	.63	.150	.110	.48	.58	.63	.69	1.2	1.3
APR											
24...	77	.50	.48	.070	.080	.49	.50	.56	.58	1.1	1.1
MAY											
13...	95	.55	.55	.130	.120	.31	.07	.44	.19	.99	.74
JUN											
10...	105	.50	.53	.250	.220	.29	.40	.54	.62	1.0	1.2
JUL											
15...	103	--	.46	--	.000	--	.47	--	.47	--	.93
AUG											
12...	97	.67	.08	.170	.020	.11	.30	.28	.32	.95	.40
SEP											
03...	107	.55	.60	.070	.100	.34	.27	.41	.37	.96	.97

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)
OCT											
03...	.050	.030	3	2	300	40	0	1	20	10	0
NOV											
06...	.050	.020	--	--	--	--	--	--	--	--	--
DEC											
11...	.040	.020	--	--	--	--	--	--	--	--	--
JAN											
03...	.030	.030	3	1	100	20	0	0	10	<10	0
MAR											
19...	.220	.080	--	--	--	--	--	--	--	--	--
24...	.140	.030	4	3	100	20	0	0	10	<10	5
APR											
24...	.050	.010	--	--	--	--	--	--	--	--	--
MAY											
13...	.040	.010	--	--	--	--	--	--	--	--	--
JUN											
10...	.070	.030	--	--	--	--	--	--	--	--	--
JUL											
15...	.040	.010	4	2	100	30	0	3	<10	20	0
AUG											
12...	.050	.030	--	--	--	--	--	--	--	--	--
SEP											
03...	.280	.270	--	--	--	--	--	--	--	--	--

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 03...	1	6	5	400	50	12	2	40	8	<.1	<.1
NOV 06...	--	--	--	--	--	--	--	--	--	--	--
DEC 11...	--	--	--	--	--	--	--	--	--	--	--
JAN 03...	0	3	3	280	80	4	0	30	20	<.1	<.1
MAR 19...	--	--	--	--	--	--	--	--	--	--	--
24...	0	12	2	5200	60	22	0	180	20	<.1	<.1
APR 24...	--	--	--	--	--	--	--	--	--	--	--
MAY 13...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	0	7	5	250	20	9	5	50	0	.1	<.1
AUG 12...	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT 03...	1	0	0	0	0	0	10	2	--	4.1	--
NOV 06...	--	--	--	--	0	--	--	--	5.7	--	--
DEC 11...	--	--	--	--	0	--	--	--	3.9	--	--
JAN 03...	2	1	0	0	3	2	10	40	--	3.8	.3
MAR 19...	--	--	--	--	--	--	--	--	7.3	--	--
24...	9	2	0	0	0	0	50	0	--	--	--
APR 24...	--	--	--	--	0	--	--	--	5.1	--	--
MAY 13...	--	--	--	--	--	--	--	--	3.8	--	--
JUN 10...	--	--	--	--	0	--	--	--	3.0	--	--
JUL 15...	1	0	0	0	0	0	30	8	--	3.6	.6
AUG 12...	--	--	--	--	0	--	--	--	5.5	--	--
SEP 03...	--	--	--	--	--	--	--	--	6.5	--	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
MAR 24...	<1.1	<.7	7.3	5.0	1.9	2.0	4.7	4.7	.04	.01
JUL 15...	<1.6	<1.1	<.4	<.3	1.7	1.6	<.4	<.4	.07	.06

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)
NOV												
06...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR												
19...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV											
06...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR											
19...	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
DEC				
11...	0950	80	11.0	184
11...	1000	130	14.0	182
11...	1015	225	23.5	181
11...	1030	266	24.5	178
11...	1040	328	27.0	179
11...	1050	391	27.0	160
11...	1105	454	25.0	153
11...	1115	536	24.0	148
11...	1130	598	23.0	146
11...	1140	660	23.0	144
JAN				
03...	1110	58	6.80	210
03...	1120	121	8.70	200
03...	1130	215	18.0	215
03...	1140	266	20.0	175
03...	1155	328	22.0	175
03...	1215	391	22.0	150
03...	1225	454	20.5	130
03...	1235	538	19.0	125
03...	1250	598	18.0	120
03...	1300	660	18.5	112
APR				
24...	1000	266	24.0	160
24...	1015	58	6.00	170
24...	1030	121	14.0	150
24...	1040	215	24.0	153
24...	1105	328	27.0	155
24...	1120	391	26.0	145
24...	1130	454	25.0	142
24...	1140	536	25.0	136
24...	1148	598	23.0	138
24...	1153	660	24.0	134
MAY				
13...	1000	58	9.50	220
13...	1015	121	11.5	215
13...	1030	215	20.6	205
13...	1045	266	22.8	193
13...	1105	328	24.2	178
13...	1115	391	24.3	172
13...	1130	454	23.0	158
13...	1145	536	21.4	152
13...	1200	598	20.7	142
13...	1215	660	21.0	147
JUN				
10...	1142	58	3.00	268
10...	1152	121	11.0	252
10...	1201	215	21.0	224
10...	1208	266	22.0	240
10...	1215	328	25.0	220
10...	1225	391	26.0	173
10...	1230	454	24.0	164
10...	1245	536	24.0	158
10...	1250	598	22.0	160
10...	1300	660	22.0	156
JUL				
15...	1000	266	27.0	220
15...	1005	58	4.70	225
15...	1030	121	12.0	215
15...	1050	215	21.0	215
15...	1110	328	24.0	215
15...	1130	391	24.0	205
15...	1145	454	22.0	200
15...	1205	536	21.0	200
15...	1215	598	18.0	200
15...	1230	660	19.0	200
AUG				
12...	1030	266	21.0	192
12...	1040	58	4.00	191
12...	1100	121	10.0	190
12...	1400	215	18.0	180
12...	1520	328	24.0	180
12...	1540	391	25.0	185
12...	1555	454	24.0	187
12...	1605	538	23.0	190
12...	1620	598	22.0	191
12...	1630	660	22.0	193
SEP				
03...	1130	266	23.0	192
03...	1155	66	7.50	206
03...	1205	121	12.0	194
03...	1210	215	22.0	191
03...	1215	328	26.0	191
03...	1225	391	26.0	189
03...	1235	454	24.0	187
03...	1250	538	23.0	185
03...	1300	598	22.0	185
03...	1305	660	22.0	184

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
Mar. 27 to Apr. 23	27	31.2	22.8	10.9	.720	Polyethylene strip
Apr. 23 to May 19	26	3.54	3.23	21.4	1.54	Polyethylene strip
June 30 to July 23	23	1.02	22.8	17.8	8.44	Polyethylene strip

ND Material specifically analyzed for, but not detected.

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUL 9,79	AUG 9,79	SEP 5,79	NOV 6,79	MAR 19,80
TIME	1100	1100	1100	1100	1000
TOTAL CELLS/ML	17000	40000	160000	1200	3000
DIVERSITY: DIVISION	1.5	1.5	1.3	1.6	1.5
.CLASS	1.5	1.5	1.3	1.6	1.5
..ORDER	1.8	1.6	1.3	1.9	1.5
...FAMILY	2.2	1.8	1.4	2.1	2.5
....GENUS	3.2	2.5	1.7	2.9	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	*	0	--	-	*	0	--	-	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	*	0	--	-	39	1
...MICRACTINIACEAE										
....GOLENKINIA	150	1	--	-	*	0	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	*	0	550	1	1000	1	13	1	--	-
....CHLORELLA	--	-	--	-	2300	1	--	-	--	-
....CHODATELLA	--	-	--	-	--	-	26	2	--	-
....DICTYOSPHAERIUM	2100	12	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	300	2	1100	3	*	0	--	-	--	-
....OOCYSTIS	370	2	--	-	--	-	--	-	--	-
....QUADRIGULA	--	-	--	-	--	-	--	-	160	5
....SELENASTRUM	--	-	3200	8	--	-	--	-	--	-
....TETRAEDRON	*	0	--	-	*	0	--	-	--	-
....TREUBARIA	*	0	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	600	3	--	-	--	-	--	-	--	-
....CRUCIGENIA	890	5	--	-	--	-	--	-	--	-
....SCENEDESMUS	1200	7	3700	9	6400	4	230#	19	470#	16
....TETRASTRUM	--	-	--	-	*	0	52	4	--	-
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-	--	-
..ULOTRICHALES										
...PROTOCOCCACEAE										
....PROTOCOCCUS(PHYTOCONIS)	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	220	1	--	-	*	0	13	1	--	-
...VOLVOCACEAE										
....GONIUM	--	-	--	-	--	-	--	-	--	-
....PANDORINA	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	4900#	29	2200	6	6900	4	210#	17	--	-
....MELOSIRA	3100#	18	10000#	26	--	-	190#	16	--	-
....SKELETONEMA	--	-	--	-	62000#	38	--	-	--	-
....STEPHANODISCUS	150	1	--	-	--	-	100	8	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	39	1
....COCCONEIS	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	190	6
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-
....FRAGILARIA	--	-	280	1	--	-	--	-	39	1
....SYNEDRA	--	-	--	-	--	-	--	-	39	1
...NAVICULACEAE										
....NAVICULA	--	-	--	-	--	-	39	3	510#	17
...NITZSCHIACEAE										
....NITZSCHIA	150	1	*	0	--	-	26	2	270	9
...SURIRELLACEAE										
....SURIRELLA	--	-	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...CHROMULINACEAE										
....CHRYSOCOCCUS	--	-	--	-	--	-	--	-	--	-
...OCHROMONADACEAE										
....KEPHYRIOPSIS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUL 9,79		AUG 9,79		SEP 5,79		NOV 6,79		MAR 19,80	
TIME	1100		1100		1100		1100		1000	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	*	0	--	-	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	13	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	4400	11	2000	1	--	-	--	-
....ANACYSTIS	600	3	14000#	35	80000#	49	--	-	--	-
..HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	1900	11	--	-	--	-	310#	25	1200#	42
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....PHACUS	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..GYMNODINIALES										
...GYMNODINIACEAE										
....GYMNODINIUM	150	1	--	-	--	-	--	-	--	-
..PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-

DATE	MAY 13,80	JUN 10,80	JUL 15,80	AUG 12,80	SEP 3,80
TIME	1100	1200	1200	1330	1200
TOTAL CELLS/ML	6400	6600	46000	20000	4800
DIVERSITY: DIVISION	1.6	1.2	0.7	1.6	1.5
.CLASS	1.7	1.2	0.7	1.6	1.5
..ORDER	2.4	2.1	0.7	2.0	1.9
...FAMILY	3.1	2.6	0.7	2.1	2.3
....GENUS	3.6	3.2	1.7	2.6	2.8

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	52	1	--	-	--	-	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	310	5	--	-	--	-	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-
....MICRACTINIUM	470	7	--	-	--	-	--	-	100	2
...OOCYSTACEAE										
....ANKISTRODESMUS	170	3	78	1	--	-	--	-	--	-
....CHLORELLA	--	-	130	2	--	-	--	-	--	-
....CHODATELLA	--	-	*	0	--	-	200	1	--	-
....DICTYOSPHAERIUM	--	-	100	2	--	-	--	-	270	6
....KIRCHNERIELLA	--	-	100	2	--	-	400	2	--	-
....OOCYSTIS	55	1	--	-	--	-	--	-	67	1
....QUADRIGULA	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	100	2
....TETRAEDRON	--	-	*	0	--	-	*	0	--	-
....TREUBARIA	--	-	*	0	--	-	--	-	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	2500	5	--	-	270	6
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	500	8	2100#	32	1900	4	1200	6	370	8
....TETRASTRUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	MAY 13,80		JUN 10,80		JUL 15,80		AUG 12,80		SEP 3,80	
TIME	1100		1200		1200		1330		1200	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	420	6	--	-	--	-	--	-
..ULOTRICHALES										
...PROTOCOCCACEAE										
....PROTOCOCCUS(PHYTOCONIS)	--	-	310	5	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	330	5	100	2	--	-	200	1	67	1
...VOLVOCACEAE										
....GONIUM	220	3	--	-	--	-	--	-	--	-
....PANDORINA	170	3	--	-	--	-	--	-	540	11
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	1000#	15	1000#	16	20000#	44	4400#	22	250	5
....MELOSIRA	830	13	1200#	19	20000#	42	3300#	16	2000#	42
....SKELETONEMA	--	-	--	-	--	-	--	-	--	-
....STEPHANODISCUS	83	1	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	55	1	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	*	0	--	-
...CYMBELLACEAE										
....CYMBELLA	55	1	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	55	1	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	190	3	180	3	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	170	3	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	170	3	--	-	--	-	--	-	33	1
...NITZSCHIACEAE										
....NITZSCHIA	110	2	78	1	--	-	--	-	33	1
...SURIRELLACEAE										
....SURIRELLA	*	0	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...CHROMULINACEAE										
....CHRYSOCOCCUS	55	1	--	-	--	-	--	-	--	-
...OCHROMONADACEAE										
....KEPHYRIOPSIS	55	1	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	200	1	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	*	0	--	-	--	-	1000	5	*	0
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	100	2	--	-	--	-	--	-
....ANACYSTIS	1600#	25	--	-	1900	4	7700#	37	670	14
..HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	100	2	--	-	1600	8	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....PHACUS	*	0	*	0	--	-	--	-	--	-
....TRACHELOMONAS	*	0	*	0	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..GYMNODINIALES										
...GYMNODINIACEAE										
....GYMNODINIUM	--	-	--	-	--	-	--	-	--	-
..PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	*	0	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
03...	1030	9040	25	610
NOV				
06...	1100	14400	3	117
DEC				
11...	1100	12200	5	165
JAN				
03...	1200	11700	3	95
MAR				
19...	1000	27100	95	6950
24...	1130	46800	136	17200
APR				
24...	1100	10000	7	189
MAY				
13...	1100	10700	10	289
JUN				
10...	1200	10400	14	393
JUL				
15...	1200	5130	5	69
AUG				
12...	1330	4570	3	37
SEP				
03...	1200	5700	5	77

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	9.0	6.0				---	11.0	18.0	21.0	21.0	24.0
2	17.0	9.0	5.0				---	11.0	20.0	21.0	21.0	24.0
3	17.0	9.0	5.0				---	12.0	20.0	21.0	22.0	24.0
4	17.0	8.0	5.0				---	12.0	20.0	21.0	22.0	24.0
5	17.0	8.0	5.0				---	13.0	19.0	22.0	22.0	24.0
6	17.0	8.0	5.0				---	13.0	20.0	22.0	22.0	24.0
7	17.0	8.0	5.0				---	14.0	20.0	23.0	22.0	24.0
8	17.0	8.0	5.0				---	14.0	20.0	23.0	22.0	24.0
9	17.0	8.0	4.0				---	15.0	20.0	23.0	23.0	23.0
10	17.0	5.0	4.0				---	15.0	19.0	23.0	23.0	23.0
11	14.0	5.0	---				---	15.0	18.0	24.0	23.0	23.0
12	14.0	5.0	---				---	14.0	18.0	24.0	24.0	23.0
13	14.0	5.0	---				---	15.0	19.0	24.0	24.0	23.0
14	11.0	4.0	---				---	15.0	19.0	24.0	24.0	22.0
15	11.0	4.0	---				---	15.0	20.0	24.0	24.0	21.0
16	9.0	5.0	---				---	13.0	20.0	24.0	24.0	21.0
17	9.0	5.0	---				---	14.0	20.0	24.0	24.0	20.0
18	9.0	5.0	---				---	14.0	20.0	24.0	23.0	19.0
19	9.0	5.0	---				---	14.0	20.0	24.0	23.0	19.0
20	10.0	5.0	---				---	14.0	20.0	24.0	23.0	18.0
21	11.0	5.0	---				---	14.0	20.0	27.0	23.0	18.0
22	11.0	6.0	---				---	15.0	20.0	27.0	22.0	19.0
23	11.0	6.0	---				---	17.0	20.0	26.0	22.0	19.0
24	12.0	6.0	---				9.0	17.0	20.0	24.0	22.0	17.0
25	12.0	7.0	---				10.0	18.0	20.0	25.0	22.0	17.0
26	13.0	8.0	---				10.0	18.0	28.0	25.0	22.0	18.0
27	13.0	8.0	---				10.0	18.0	28.0	26.0	23.0	18.0
28	12.0	7.0	---				10.0	18.0	28.0	26.0	23.0	18.0
29	11.0	7.0	---				10.0	18.0	24.0	26.0	24.0	18.0
30	11.0	6.0	---				10.0	18.0	23.0	26.0	24.0	17.0
31	9.0	---	---				---	18.0	---	26.0	24.0	---
MEAN	13.0	6.5	5.0				10.0	15.0	20.5	24.0	23.0	21.0

01359528 NORMANS KILL AT ALBANY, NY

LOCATION.--Lat 42°38'00", long 73°48'22", Albany County, Hydrologic Unit 02020006, on left bank, 0.35 mi (0.56 km) upstream from bridge on Normans Kill Road at Normansville, and 0.40 mi (0.64 km) upstream from Delaware Avenue bridge in Albany.

DRAINAGE AREA.--168 mi² (435 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949, 1954, 1959, 1962-65. May 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Diversion above station for municipal supply by city of Watervliet and town of Guilderland. Seasonal diversions for two golf courses.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 11,600 ft³/s (329 m³/s) Mar. 22, 1980, gage height 13.41 ft (4.087 m); minimum 11 ft³/s (0.31 m³/s) Sept. 29, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft³/s (62.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 22	1515	*11,600	329	*13.41	4.087	Mar. 30	1200	2,420	68.5	7.12	2.170

Minimum discharge, 11 ft³/s (0.31 m³/s) Sept. 29, gage height 2.99 ft (0.911 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	44	189	70	33	28	553	370	48	64	57	33
2	60	49	149	60	33	28	420	275	58	53	74	18
3	93	311	130	52	33	28	366	224	66	51	27	21
4	154	595	102	50	33	28	370	175	57	46	18	16
5	62	275	93	48	33	30	522	141	48	57	18	15
6	130	192	88	60	33	35	443	133	44	93	36	15
7	178	149	84	50	33	40	340	157	62	48	24	13
8	180	130	86	50	32	100	283	133	57	49	25	13
9	130	114	86	50	30	400	319	117	48	53	33	12
10	109	133	76	52	29	250	568	105	53	48	31	15
11	90	109	68	60	28	200	537	100	46	48	34	12
12	80	100	68	74	26	130	392	95	44	60	38	12
13	74	93	66	56	25	90	319	130	41	48	24	12
14	68	88	66	54	23	70	271	112	41	44	15	16
15	58	76	68	60	21	70	332	102	48	44	16	16
16	53	74	64	58	20	70	362	95	125	46	15	15
17	49	70	54	55	21	76	250	86	53	80	13	15
18	60	68	50	53	23	472	214	86	46	48	13	49
19	57	66	47	55	25	379	186	86	44	44	20	18
20	44	64	43	48	27	448	172	76	44	66	28	15
21	48	62	51	40	30	1190	160	72	48	88	20	25
22	49	55	53	35	35	8070	138	72	43	60	16	18
23	49	51	53	35	40	2820	130	68	43	60	15	15
24	55	51	60	35	40	1280	122	64	43	49	12	13
25	53	68	127	34	37	1270	117	60	44	41	12	12
26	48	74	357	34	35	895	109	57	49	38	12	24
27	49	507	243	34	33	558	102	53	48	38	13	17
28	49	895	163	33	31	434	117	49	48	36	12	13
29	49	411	127	33	30	477	467	48	82	43	12	13
30	48	264	100	33	---	1880	628	46	133	48	13	13
31	46	---	80	33	---	895	---	46	---	43	31	---
TOTAL	2321	5238	3091	1494	872	22741	9309	3433	1654	1634	727	514
MEAN	74.9	175	99.7	48.2	30.1	734	310	111	55.1	52.7	23.5	17.1
MAX	180	895	357	74	40	8070	628	370	133	93	74	49
MIN	44	44	43	33	20	28	102	46	41	36	12	12
*	8.20	8.04	8.17	7.96	8.22	7.71	8.09	8.25	8.76	8.57	9.04	9.19

WTR YR 1980 TOTAL 53028 MEAN 145 MAX 8070 MIN 12

* Diversion, in cubic feet per second, from Watervliet Reservoir for municipal supply; furnished by city of Watervliet and town of Guilderland.

01359750 MOORDENER KILL AT CASTLETON-ON-HUDSON, NY

LOCATION.--Lat 42°32'02", long 73°44'15", Rensselaer County, Hydrologic Unit 02020006, on left bank 800 ft (244 m) downstream from bridge on State Highway 150, 0.2 mi (0.3 km) east of village of Castleton-on-Hudson, 0.5 mi (0.8 km) downstream from unnamed tributary, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--32.6 mi^2 (84.4 km^2).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 98.72 ft (30.090 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1957, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diurnal fluctuation of low flow by mills upstream and occasional regulation at dam 800 ft (244 m) upstream.

AVERAGE DISCHARGE.--23 years, 38.1 ft^3/s (1.079 m^3/s), 15.87 in/yr (403 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft^3/s (38.2 m^3/s) Jan. 22, 1959, gage height, 3.63 ft (1.106 m); maximum gage height, 4.02 ft (1.225 m) Jan. 27, 1976 (ice jam); minimum discharge, 0.30 ft^3/s (0.008 m^3/s) Aug. 9, 10, 1964, gage height, 0.25 ft (0.076 m); minimum daily, 1.0 ft^3/s (0.028 m^3/s) Sept. 6, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s (11 m^3/s):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0030	337	9.54	2.08	0.634

Minimum discharge, 3.5 ft^3/s (0.10 m^3/s) Sept. 8, 9, 10, 11, 12, 13, gage height, 0.57 ft (0.174 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	13	58	27	9.0	4.5	80	40	7.9	44	5.9	4.4
2	47	15	50	25	8.0	4.5	71	35	8.4	25	6.4	4.4
3	67	75	42	23	8.0	4.5	66	31	10	19	6.4	4.4
4	130	70	39	23	7.4	4.5	90	28	10	14	5.5	4.4
5	71	46	37	22	7.0	4.5	120	25	8.4	11	5.1	4.4
6	133	36	35	27	7.0	5.0	85	25	7.3	17	8.4	4.1
7	70	32	35	27	7.0	6.0	70	28	7.9	13	9.0	3.8
8	48	29	32	25	7.0	40	63	27	8.4	12	6.4	3.8
9	43	27	27	23	6.6	25	99	24	8.4	12	5.5	3.8
10	39	26	26	25	6.0	12	234	21	9.6	11	5.1	4.1
11	32	27	26	31	6.0	10	138	19	8.4	9.6	5.1	4.1
12	29	25	25	25	6.0	9.0	99	19	7.3	10	5.5	3.6
13	28	22	24	22	6.0	8.0	85	28	6.8	9.0	5.1	3.7
14	25	24	24	18	6.0	8.0	73	37	6.4	7.9	5.1	4.3
15	22	25	22	16	6.0	9.0	110	27	6.4	7.3	5.1	4.0
16	20	22	22	15	6.0	10	90	22	10	6.8	5.1	3.9
17	19	20	31	15	6.0	20	68	19	8.4	6.8	4.8	4.0
18	18	20	26	14	6.0	219	58	19	6.8	6.4	4.8	8.6
19	17	18	23	15	6.0	74	52	22	6.4	5.9	5.1	5.4
20	16	18	22	14	6.0	46	47	19	6.4	6.4	16	4.6
21	16	17	22	13	6.4	68	44	17	6.4	7.9	8.4	4.8
22	15	17	23	13	7.0	183	39	17	5.9	7.3	6.4	5.2
23	15	18	25	12	7.0	82	35	15	5.5	21	5.5	5.0
24	17	18	25	11	6.4	62	33	13	5.5	19	5.1	4.6
25	17	32	64	11	6.0	130	31	12	5.1	12	4.8	4.5
26	15	112	67	12	5.0	101	30	11	4.8	9.0	4.4	5.4
27	14	282	47	13	5.0	73	28	10	4.8	7.3	4.4	5.1
28	14	144	37	13	5.0	63	30	9.6	4.8	6.4	4.4	4.8
29	14	96	35	11	4.5	81	68	9.6	16	6.4	4.4	4.6
30	14	71	33	10	---	142	51	8.4	73	5.9	4.4	4.5
31	13	---	29	9.0	---	105	---	8.4	---	5.5	4.8	---
TOTAL	1057	1397	1033	560.0	185.3	1613.5	2187	646.0	291.4	361.8	182.4	136.3
MEAN	34.1	46.6	33.3	18.1	6.39	52.0	72.9	20.8	9.71	11.7	5.88	4.54
MAX	133	282	67	31	9.0	219	234	40	73	44	16	8.6
MIN	13	13	22	9.0	4.5	4.5	28	8.4	4.8	5.5	4.4	3.6
CFSM	1.05	1.43	1.02	.56	.20	1.60	2.24	.64	.30	.36	.18	.14
IN.	1.21	1.59	1.18	.64	.21	1.84	2.50	.74	.33	.41	.21	.16

CAL YR 1979 TOTAL 21612.6 MEAN 59.2 MAX 737 MIN 4.7 CFSM 1.82 IN 24.66
WTR YR 1980 TOTAL 9650.7 MEAN 26.4 MAX 282 MIN 3.6 CFSM .81 IN 11.01

01359802 HUDSON RIVER BELOW CASTLETON-ON-HUDSON, NY

LOCATION.--Lat 42°31'07", long 73°46'00", Albany-Rensselaer Counties, Hydrologic Unit 02020006, at navigation light 52, 0.5 mi (0.8 km) southwest of Castleton-on-Hudson, 0.6 mi (1.0 km) downstream from Vlochie Kill, and 1.7 mi (2.7 km) downstream from Vloman Kill.

PERIOD OF RECORD.--Water year 1978 to current year.
MINOR ELEMENT DATA: 1978-79 (c).
PESTICIDE DATA: 1978-79 (c).
ORGANIC DATA: PCB--1978-79 (c), 1980 (b).
PCN--1978-79 (c).
NUTRIENT DATA: 1978 (c), 1979 (a).
SEDIMENT DATA: 1978-79 (c), 1980 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLA- TILE, SUS- PENDED (MG/L)	SOLIDS, NON- VOLA- TILE, SUS- PENDED (MG/L)	PCB, DIS- SOLVED (UG/L)	PCB, TOTAL (UG/L)	SEDI- MENT, SUS- PENDED (MG/L)
JUN							
25...	1100	4	4	0	.1	--	15
JUL							
08...	1100	2	3	0	--	.2	23
30...	1015	12	3	9	--	--	16
AUG							
13...	1400	4	4	0	--	.1	13
25...	1030	8	8	0	--	.1	9

01359918 SILVER CREEK AT DORMANSVILLE, NY

LOCATION.--Lat 42°29'17", long 73°58'56", Albany County, Hydrologic Unit 02020006, on left bank 17 ft (5.2 m) upstream from culvert on County Highway 411, 300 ft (91.4 m) downstream from unnamed tributary, 0.6 mi (0.97 km) upstream from mouth, and 1.0 mi (1.6 km) southeast of Dormansville.

DRAINAGE AREA.--2.90 mi^2 (7.51 km^2).

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 720 ft (219 m), from topographic map.

REMARKS.--Records poor. Water diverted from Basic Creek Reservoir, through tunnel, enters basin upstream from station and is included in records of daily discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 618 ft^3/s (17.50 m^3/s) Mar. 21, 1980, gage height 7.54 ft (2.298 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) Aug. 18, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 618 ft^3/s (17.50 m^3/s) Mar. 21, gage height 7.54 ft (2.298 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	24	23	5.2	2.2	.86	84	9.1	.67	1.6	1.0	.25
2	16	25	23	5.0	2.3	.86	82	9.6	.67	1.0	1.2	.30
3	72	43	22	4.5	2.5	.86	80	8.9	.82	.91	.50	.35
4	31	30	22	4.0	3.0	.86	84	8.1	.75	.75	.33	.35
5	41	27	21	3.8	3.5	.87	83	7.0	.75	.75	.31	.35
6	76	27	22	3.5	3.9	.87	77	18	.67	.91	.50	.33
7	37	27	21	3.2	4.0	1.0	55	40	.75	.91	.41	.31
8	32	27	21	3.1	3.8	14	17	40	.75	.82	.46	.29
9	31	26	21	3.5	3.5	17	48	47	.75	.75	.54	.28
10	31	26	21	4.2	3.2	8.6	59	63	.82	.75	.52	.33
11	29	25	21	4.0	3.0	8.6	26	64	.67	.75	.58	.30
12	28	25	20	6.0	2.8	5.6	20	65	.60	1.2	.64	.27
13	27	25	20	49	2.7	3.8	19	66	.60	1.0	.40	.29
14	27	25	20	51	2.6	12	22	65	.53	.75	.26	.32
15	26	25	20	50	2.5	43	21	65	.53	.75	.28	.35
16	26	25	18	50	2.4	31	14	65	.91	.67	.25	.34
17	26	25	3.5	50	2.3	32	10	66	.67	.67	.23	.34
18	25	24	3.4	49	2.2	80	8.6	68	.60	.60	.20	1.0
19	25	24	3.4	12	2.2	59	6.8	45	.46	.60	.30	.60
20	25	24	3.5	7.7	2.2	87	6.2	4.0	.46	.67	.40	.36
21	24	24	4.0	6.6	2.2	235	6.2	.25	.53	1.4	.35	.54
22	24	24	4.5	5.0	2.1	272	5.6	1.6	.46	.67	.35	.43
23	24	24	6.0	4.4	2.0	124	5.0	1.6	.46	.75	.35	.35
24	25	24	8.0	3.9	1.9	103	5.4	1.5	.46	.67	.25	.31
25	25	26	9.4	3.4	1.8	115	4.8	1.3	.53	.60	.25	.28
26	24	75	9.6	3.0	1.6	94	4.0	1.0	.60	.60	.30	.52
27	24	51	7.9	2.7	1.3	88	3.5	.91	.53	.60	.25	.37
28	24	29	7.0	2.4	1.1	84	4.1	.91	.53	.62	.25	.29
29	24	26	6.4	2.3	.90	91	21	.67	1.7	.70	.25	.29
30	24	24	6.0	2.2	---	106	11	.67	4.3	.80	.25	.29
31	24	---	5.6	2.2	---	89	---	.67	---	.76	.35	---
TOTAL	907	856	424.2	406.8	71.70	1808.78	893.2	834.78	23.53	24.98	12.51	10.98
MEAN	29.3	28.5	13.7	13.1	2.47	58.3	29.8	26.9	.78	.81	.40	.37
MAX	76	75	23	51	4.0	272	84	68	4.3	1.6	1.2	1.0
MIN	10	24	3.4	2.2	.90	.86	3.5	.25	.46	.60	.20	.25

CAL YR 1979 TOTAL 8948.74 MEAN 24.5 MAX 364 MIN .46
WTR YR 1980 TOTAL 6274.46 MEAN 17.1 MAX 272 MIN .20

01361450 HUDSON RIVER AT CATSKILL, NY

LOCATION.--Lat 42°12'36", long 73°51'12", Greene-Columbia Counties, Hydrologic Unit 02020006, at Greene County Highway Department Dock in Catskill, 600 ft (183 m) upstream from Catskill Creek, and 0.9 mi (1.4 km) downstream from Rip Van Winkle Bridge.

DRAINAGE AREA.--9,336 mi² (24,180 km²).

PERIOD OF RECORD.--Water years 1969-75, 1978 to current year.
CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c).
MINOR ELEMENT DATA: 1972-74 (b), 1978-79 (c).
PESTICIDE DATA: 1978-79 (c).
ORGANIC DATA: OC--1974 (b), 1975 (c).
PCB--1978-79 (c), 1980 (b).
PCN--1978-79 (c).
NUTRIENT DATA: 1969 (c), 1970-74 (d), 1975, 1978 (c), 1979 (a).
SEDIMENT DATA: 1978 (b), 1979 (c), 1980 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	SOLIDS, NON-VOLA-TILE, SUS-PENDED (MG/L)	PCB, DIS-SOLVED (UG/L)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)
JUN							
25...	1315	0	0	0	.0	--	20
JUL							
08...	1430	9	2	7	--	.4	11
30...	0845	19	9	10	--	--	31
AUG							
13...	1530	8	3	5	--	.1	14
25...	1200	6	6	0	--	.1	14

01362198 ESOPUS CREEK AT SHANDAKEN, NY
(Hydrologic bench-mark station)

LOCATION.--Lat 42°06'59", long 74°23'20", Ulster County, Hydrologic Unit 02020006, on left bank 2,400 ft (732 m) downstream from bridge on State Highway 28, at Shandaken, 0.5 mi (0.8 km) downstream from Bushnellsville Creek, 0.5 mi (0.8 km) upstream from Fox Hollow Creek, and 5.2 mi (8.4 km) northwest of Phoenicia. Water-quality sampling site at discharge station.

DRAINAGE AREA.--59.5 mi² (154.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,017.27 ft (310.064 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for winter months and the period Mar. 21-Apr. 1 when orifice was torn out which are poor. Occasional slight regulation when filling or draining swimming pools or small ponds above station.

AVERAGE DISCHARGE.--17 years, 144 ft³/s (4.078 m³/s), 32.65 in/yr (829 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft³/s (450 m³/s) Mar. 21, 1980, gage height, 13.00 ft (3.962 m) from floodmarks, from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurement at gage height 10.88 ft (3.316 m); minimum, 2.8 ft³/s (0.079 m³/s) Nov. 22, 23, 1964, result of freezeup, gage height, 4.15 ft (1.265 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 5	2000	2,020	57.2	7.78	2.371
Nov. 26	2045	2,580	73.1	8.15	2.484
Mar. 18	0700	1,580	44.7	7.31	2.228
Mar. 21	a1800	*15,900	450	*b13.00	3.962
Apr. 10	0300	1,630	46.2	7.58	2.310

a Estimated.
b From floodmarks.

Minimum daily discharge, 4.7 ft³/s (0.133 m³/s); minimum gage height, 4.42 ft (1.347 m) Sept. 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	59	242	105	52	23	294	404	41	245	12	6.5
2	256	76	204	97	47	22	270	334	39	175	13	6.2
3	238	279	173	92	42	22	235	297	40	137	24	6.2
4	226	304	156	90	39	22	273	263	39	113	19	6.2
5	584	274	140	81	38	22	276	230	34	103	16	6.5
6	996	238	128	90	37	24	253	212	32	111	17	7.4
7	539	211	122	70	36	35	240	191	42	87	15	6.5
8	358	186	108	70	35	80	240	164	37	80	13	6.0
9	314	166	97	78	35	60	702	146	37	74	12	6.0
10	251	170	92	72	35	50	1220	130	38	65	11	5.5
11	215	156	85	74	35	42	702	121	36	58	12	5.5
12	200	143	81	125	35	37	507	111	34	53	12	5.2
13	190	134	78	108	35	50	417	107	31	48	12	5.2
14	170	128	74	90	35	70	354	109	29	48	11	5.2
15	153	122	70	88	35	100	439	95	27	48	20	5.2
16	140	113	65	85	40	119	395	87	31	49	14	5.2
17	128	108	70	83	40	200	334	84	27	48	12	5.2
18	119	103	80	81	35	996	301	84	26	44	11	6.5
19	108	95	74	81	30	394	266	84	25	38	11	5.7
20	103	92	70	78	25	314	245	84	26	34	11	5.2
21	95	88	65	74	25	4100	217	80	26	31	9.8	5.0
22	90	83	61	70	24	3200	191	75	25	32	9.4	4.7
23	85	81	59	70	24	1100	164	72	25	33	9.1	5.0
24	90	78	61	68	26	700	150	66	27	27	8.4	5.2
25	81	88	103	66	29	550	150	63	27	24	8.0	5.5
26	76	760	116	66	29	350	137	58	27	22	7.4	10
27	72	1260	116	70	27	310	133	54	27	19	6.8	7.7
28	67	698	116	70	25	300	230	51	27	17	5.5	7.1
29	67	443	119	66	24	310	660	47	124	17	5.7	6.5
30	65	309	116	62	---	330	512	44	358	17	5.5	6.5
31	61	---	111	56	---	330	---	42	---	14	6.2	---
TOTAL	6341	7045	3252	2476	974	14262	10507	3989	1364	1911	359.8	180.3
MEAN	205	235	105	79.9	33.6	460	350	129	45.5	61.6	11.6	6.01
MAX	996	1260	242	125	52	4100	1220	404	358	245	24	10
MIN	61	59	59	56	24	22	133	42	25	14	5.5	4.7
CFSM	3.45	3.95	1.77	1.34	.57	7.73	5.88	2.17	.77	1.04	.20	.10
IN.	3.96	4.40	2.03	1.55	.61	8.92	6.57	2.49	.85	1.19	.22	.11

CAL YR 1979 TOTAL 67114.1 MEAN 184 MAX 2080 MIN 5.0 CFSM 3.09 IN 41.96
WTR YR 1980 TOTAL 52661.1 MEAN 144 MAX 4100 MIN 4.7 CFSM 2.42 IN 32.92

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.
CHEMICAL DATA: 1963-65 (a), 1966-67 (b), 1968-80 (d).
MINOR ELEMENT DATA: 1964-65, 1967-73, 1975-76 (a), 1977 (b), 1978-80 (a).
RADIOCHEMICAL DATA: 1967-77, 1979-80 (a).
PESTICIDE DATA: 1967-72, 1974-77, 1979-80 (a).
ORGANIC DATA: OC--1979 (a).
PCB--1974-77, 1979-80 (a).
PCN--1977, 1979-80 (a).
NUTRIENT DATA: 1968 (a), 1969-71 (d), 1972 (c), 1974 (a), 1975-80 (d).
BIOLOGICAL DATA:
Bacteria--1968-69 (d), 1970-72 (c), 1973-80 (d).
SEDIMENT DATA: 1969-71 (c), 1972-75, 1977-80 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1963 to July 1968, January 1970 to current year.

INSTRUMENTATION.--Temperature recorder since July 1963.

REMARKS.--No temperature record Dec. 18-21, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1964-68, 1970-76, 1978-80), 28.5°C Aug. 16, 1965, Aug. 9, 1980; minimum, freezing point on many days during winter periods except water years 1967 and 1976.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.5°C Aug. 9; minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT												
10...	1300	246	42	6.7	8.5	12.0	102	1100	K27	23	21	9
NOV												
19...	1315	92	38	6.9	5.5	13.2	106	—	K2	K2	15	3
DEC												
10...	1100	92	45	6.6	4.5	13.2	100	—	K2	K3	14	6
JAN												
15...	1300	88	44	6.6	3.5	14.4	110	K70	K3	K4	16	12
FEB												
12...	1100	48	53	6.7	.0	14.6	104	40	K7	K4	17	6
MAR												
11...	1000	48	77	6.5	.0	15.2	109	110	K8	K11	24	3
APR												
08...	1200	263	46	6.2	5.0	12.4	103	37	K1	K3	15	5
MAY												
20...	1100	89	52	6.6	12.0	11.2	107	48	K2	<1	16	1
JUN												
04...	1100	41	57	7.6	16.0	10.4	106	380	120	25	19	4
JUL												
08...	2100	87	55	6.9	17.5	9.2	99	500	130	140	19	5
AUG												
19...	1200	11	75	7.8	18.5	9.7	107	5300	K85	21	24	7
SEP												
09...	1500	6.0	78	7.3	19.5	8.9	105	—	K10	21	29	9

K Results based on colony count outside the acceptable range (non-ideal colony count).

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 10...	6.2	1.4	2.5	.7	12	9.2	2.7	.1	2.5	42	33	.00
NOV 19...	4.4	1.0	1.6	.3	12	7.9	1.8	.0	2.1	22	27	.11
DEC 10...	4.1	.9	1.5	.3	8	7.7	1.8	.0	2.6	35	25	.26
JAN 15...	4.5	1.1	1.7	.6	4	6.0	2.4	—	2.4	28	23	.37
FEB 12...	5.1	1.1	2.0	.3	11	8.2	3.1	.0	2.4	35	30	.30
MAR 11...	6.7	1.8	4.4	.5	11	7.2	9.2	.0	2.4	41	41	.58
APR 08...	4.3	1.0	1.7	.3	10	8.2	2.4	.0	2.7	20	26	.52
MAY 20...	4.7	1.1	2.0	.3	15	6.7	2.3	.1	2.5	30	30	.20
JUN 04...	5.7	1.1	2.1	.4	15	7.3	2.8	.1	1.7	33	31	.07
JUL 08...	5.5	1.2	1.8	.4	14	6.7	2.2	.1	2.7	39	30	.32
AUG 19...	7.3	1.5	3.1	.5	17	6.7	4.1	.1	2.8	40	37	.07
SEP 09...	8.8	1.8	3.5	.6	20	6.1	5.0	.1	2.5	42	41	.04

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 10...	—	.020	—	—	—	—	—	—	—	—	—	—
NOV 19...	.11	.020	.010	—	—	—	—	—	—	—	—	—
DEC 10...	.26	.010	.010	—	—	—	—	—	—	—	—	—
JAN 15...	.38	.010	.000	—	—	—	—	—	—	—	—	—
FEB 12...	.25	.000	—	—	—	—	—	—	—	—	—	—
MAR 11...	.55	.010	.010	—	—	—	—	—	—	—	—	—
APR 08...	.53	.040	.000	3	2	<60	20	<.7	0	4	10	0
MAY 20...	.22	.010	.010	—	—	—	—	—	—	—	—	—
JUN 04...	.06	.030	.000	3	2	100	20	<.7	0	<1	10	0
JUL 08...	.32	.020	.000	—	—	—	—	—	—	—	—	—
AUG 19...	.06	.010	.000	—	—	—	—	—	—	—	—	—
SEP 09...	.04	.000	.000	—	—	—	—	—	—	—	—	—

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--
NOV 19...	--	--	--	--	--	--	--	--	--	--	--
DEC 10...	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	--	--	--	--	--	--	--	--	--	--	--
FEB 12...	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	--	--	--	--	--	--	--	--
APR 08...	<3	3	<10	870	13	1	<10	13	30	7	.1
MAY 20...	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	<3	1	<10	90	6	2	1	<4	0	3	<.1
JUL 08...	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	--	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--
NOV 19...	--	--	--	--	--	--	--	--	--	--	--
DEC 10...	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	--	--	--	--	--	--	--	--	--	--	--
FEB 12...	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	--	--	--	--	--	--	--	--
APR 08...	.1	<10	0	0	0	0	15	<6.0	10	10	.00
MAY 20...	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	<.1	<10	0	0	0	0	19	<6.0	0	<4	.00
JUL 08...	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	--	--	--	--	--	--	--	--	--	--	--

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)
JUN 04...	.0	0	.00	.00	.0	.0	0	.00	.0	.00

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)
JUN 04...	.6	.00	1.0	.00	.00	.0	.00	.00	.0	.00

DATE	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)
JUN 04...	.00	.0	.00	.0	.00	.0	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JUN 04...	.00	.00	.00	0	0	.00	.00	.00	.00

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
APR 08...	<.5	<.3	<.4	<.3	<.7	.7	.4	.4	.02	.04
JUN 04...	<.5	<.3	<.4	<.3	.7	.7	<.4	<.4	.04	.02

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 10...	1300	246	2	1.3
NOV 19...	1315	92	2	.50
DEC 10...	1100	92	4	.99
JAN 15...	1300	88	2	.48
FEB 12...	1100	48	0	.00
MAR 11...	1000	48	2	.26
APR 08...	1200	263	18	13
MAY 20...	1100	89	2	.48
JUN 04...	1100	41	2	.22
JUL 08...	2100	87	11	2.6
AUG 19...	1200	11	2	.06
SEP 09...	1500	6.0	4	.06
24...	1545	5.2	1	.01

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.0	12.0	12.5	9.0	5.0	7.0	5.5	4.5	5.0	2.5	1.0	2.0
2	14.5	11.5	12.5	10.5	8.5	9.5	5.0	3.0	4.5	2.5	1.5	2.0
3	13.0	12.0	12.5	9.5	7.0	8.5	4.5	3.0	3.5	2.5	.5	1.5
4	14.0	12.0	12.5	8.0	6.0	7.0	5.0	3.0	4.0	.5	.0	.5
5	13.0	11.5	12.0	8.0	6.0	7.0	5.5	4.0	4.5	1.5	.5	1.0
6	12.0	10.5	11.5	7.5	5.5	6.5	7.0	4.0	5.5	.5	.0	.0
7	11.0	10.5	10.5	8.0	7.0	7.5	6.5	5.0	6.0	.5	.0	.5
8	10.5	9.0	9.5	8.0	6.5	7.0	5.0	2.5	4.5	.5	.0	.5
9	10.0	8.5	9.0	8.0	6.0	7.0	3.5	2.5	3.0	.5	.0	.5
10	9.0	8.0	8.5	9.5	8.0	9.0	4.5	3.0	4.0	.5	.5	.5
11	8.5	7.5	8.0	8.0	7.0	7.5	6.5	3.5	5.0	3.0	.5	1.0
12	8.5	7.5	8.0	8.5	6.5	7.5	8.5	5.0	7.0	3.5	.5	2.0
13	9.5	8.5	9.0	8.0	6.5	7.0	7.0	4.0	5.0	1.0	.5	.5
14	9.0	7.5	8.0	7.5	5.5	6.5	4.0	2.5	3.5	3.0	1.0	2.0
15	9.0	7.0	8.0	6.5	5.5	6.0	3.5	2.5	3.0	4.5	3.0	3.5
16	10.0	7.5	8.5	6.0	3.5	5.0	5.5	2.5	4.0	3.5	1.5	2.5
17	10.0	7.0	8.5	6.5	3.5	5.0	5.0	.5	1.5	3.5	1.5	2.5
18	11.5	9.5	10.0	7.5	5.5	6.5	---	---	---	4.0	3.0	3.5
19	12.0	8.5	10.0	7.5	5.0	6.0	---	---	---	4.0	3.0	3.5
20	13.5	10.0	11.5	8.5	5.5	6.5	---	---	---	2.5	1.0	2.5
21	15.0	10.5	12.5	8.5	6.0	7.0	---	---	---	1.5	.5	1.0
22	15.0	11.5	13.0	8.5	7.0	7.5	3.0	.5	1.5	1.5	1.0	1.5
23	15.0	11.0	13.0	10.5	7.0	8.5	4.5	2.5	3.5	2.5	.5	2.0
24	13.5	9.5	11.5	11.0	9.5	10.5	5.0	4.5	5.0	.5	.5	.5
25	9.5	8.0	9.0	10.5	10.0	10.0	6.0	5.0	5.5	.5	.5	.5
26	8.5	7.0	7.5	12.0	10.0	11.0	5.5	4.0	5.0	.5	.5	.5
27	7.0	6.0	6.5	10.0	8.5	9.0	4.0	2.5	3.0	.5	.5	.5
28	7.0	6.0	6.5	9.0	7.5	8.5	3.0	1.5	2.5	.5	.5	.5
29	8.0	7.0	7.5	7.5	6.0	7.0	3.5	3.0	3.0	.5	.5	.5
30	8.0	6.5	7.5	6.0	5.0	5.5	4.0	3.0	3.5	.5	.5	.5
31	8.5	5.0	6.5	---	---	---	3.0	2.0	2.5	.5	.5	.5
MONTH	15.0	5.0	9.5	12.0	3.5	7.5	8.5	.5	4.0	4.5	.0	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	.0	.0	.0	7.5	2.5	4.5	9.0	7.0	8.0
2	.5	.5	.5	.0	.0	.0	4.5	3.0	3.5	12.0	7.5	9.0
3	.5	.0	.5	.0	.0	.0	8.0	2.5	5.0	13.5	7.0	10.0
4	.0	.0	.0	.0	.0	.0	7.5	4.0	5.0	13.0	7.5	9.5
5	.0	.0	.0	.0	.0	.0	6.5	3.5	4.5	14.0	7.5	10.5
6	.0	.0	.0	.0	.0	.0	8.5	3.0	5.5	13.0	8.5	10.5
7	.0	.0	.0	.0	.0	.0	8.5	3.0	5.5	13.0	8.5	10.5
8	.0	.0	.0	.0	.0	.0	6.5	5.0	5.5	11.5	7.5	9.5
9	.0	.0	.0	.5	.0	.0	6.5	5.0	5.5	10.0	7.0	8.5
10	.0	.0	.0	.5	.0	.0	7.5	4.5	6.0	13.5	6.0	9.5
11	.0	.0	.0	.5	.0	.0	8.0	5.0	6.0	10.0	8.0	9.0
12	.0	.0	.0	.0	.0	.0	8.5	4.5	6.0	12.0	8.5	10.5
13	.0	.0	.0	.0	.0	.0	9.5	5.5	7.0	13.0	9.5	11.0
14	.0	.0	.0	.0	.0	.0	5.5	5.0	5.5	12.0	9.5	11.0
15	.0	.0	.0	.0	.0	.0	8.0	5.5	6.5	12.5	8.5	10.0
16	.0	.0	.0	.0	.0	.0	5.5	3.5	5.0	16.0	6.5	11.0
17	.0	.0	.0	.0	.0	.0	8.0	2.5	5.0	16.0	8.0	12.0
18	.0	.0	.0	1.0	.0	.0	7.0	3.5	5.0	12.0	10.5	11.0
19	.0	.0	.0	3.0	.0	1.0	10.5	3.5	6.5	13.5	10.0	11.5
20	.0	.0	.0	4.0	.5	2.0	9.5	4.5	7.0	17.5	10.0	13.5
21	.5	.0	.0	2.0	1.5	2.0	11.5	5.5	8.0	13.0	11.0	11.5
22	.0	.0	.0	2.0	1.0	1.5	10.5	4.5	7.0	18.0	9.5	13.0
23	.5	.0	.0	4.5	1.5	2.5	12.5	4.0	8.0	19.0	11.0	15.0
24	.5	.0	.5	5.0	2.0	3.0	13.0	5.5	9.0	19.0	12.0	15.5
25	1.0	.0	.5	2.5	2.5	2.5	8.5	7.5	8.0	19.5	12.5	15.5
26	.0	.0	.0	3.0	2.0	2.5	12.5	6.5	9.5	18.0	10.0	14.0
27	.0	.0	.0	5.5	2.0	3.5	8.5	7.0	8.0	17.5	9.5	13.5
28	.0	.0	.0	6.5	2.0	4.0	7.5	7.0	7.0	18.0	9.5	13.5
29	.0	.0	.0	4.0	3.5	4.0	7.0	6.0	6.5	18.5	9.5	14.0
30	---	---	---	4.5	3.5	4.0	11.0	6.5	8.0	16.0	11.0	13.5
31	---	---	---	4.0	3.0	3.5	---	---	---	17.5	12.5	15.0
MONTH	1.0	.0	.0	6.5	.0	1.0	13.0	2.5	6.5	19.5	6.0	11.5

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	13.5	17.0	18.5	13.0	15.0	23.0	18.5	20.5	23.5	19.0	21.5
2	17.0	14.0	15.5	15.5	13.5	14.0	25.0	19.0	21.5	25.5	19.5	22.0
3	18.0	14.0	16.0	19.0	13.5	16.0	23.0	18.5	20.5	23.0	18.5	20.5
4	17.0	13.5	15.5	21.5	13.5	17.0	26.0	19.0	22.0	23.0	16.0	19.5
5	19.5	11.5	15.0	18.0	14.5	16.5	24.5	19.0	21.5	20.0	17.5	18.5
6	20.0	11.5	15.5	20.5	15.0	17.0	25.5	19.5	22.0	23.0	16.5	19.5
7	16.0	14.0	14.5	20.5	12.5	16.5	27.0	18.5	22.5	20.5	16.0	18.0
8	15.0	11.5	13.5	18.0	14.0	16.0	27.5	20.0	23.5	20.0	14.0	16.5
9	11.5	9.0	10.5	20.0	14.0	17.0	28.5	21.5	24.0	18.5	13.0	16.0
10	14.0	9.0	11.5	22.0	15.0	18.0	26.5	19.0	22.0	19.5	15.0	16.5
11	12.5	9.0	11.0	22.0	15.0	18.5	22.0	20.0	21.0	19.5	12.5	16.0
12	17.5	9.5	13.0	22.0	15.5	18.5	23.0	19.5	20.5	19.5	14.0	16.5
13	19.0	11.0	15.0	22.5	14.0	18.0	24.0	18.0	20.5	19.5	15.0	17.0
14	20.5	12.5	16.5	23.5	14.5	18.5	20.0	17.5	18.5	19.5	16.5	17.5
15	20.5	15.0	17.5	20.5	15.5	18.5	23.5	18.0	20.0	17.5	13.5	16.0
16	20.0	14.5	17.5	24.0	17.0	20.5	20.0	16.0	18.0	17.5	11.5	14.5
17	20.0	13.0	16.5	25.0	18.5	21.0	24.0	14.0	18.5	15.5	14.0	15.0
18	19.0	13.0	16.5	25.0	17.5	21.0	21.0	15.5	18.0	15.5	13.0	15.0
19	18.0	14.0	16.0	23.5	17.0	20.0	24.0	17.0	19.5	17.0	11.0	14.0
20	15.5	14.0	14.5	24.5	18.5	21.5	24.0	17.5	20.5	17.5	12.5	15.0
21	18.0	13.0	15.0	27.0	20.0	23.0	22.0	17.0	19.0	20.5	16.0	18.0
22	20.0	13.0	16.0	23.5	20.0	21.5	20.0	16.5	18.0	22.5	17.5	20.0
23	21.0	14.0	17.5	23.0	19.0	21.0	25.0	15.5	19.5	20.0	16.0	18.5
24	23.0	16.0	19.5	24.5	17.0	20.5	24.0	16.0	20.0	18.0	14.0	15.5
25	23.0	17.5	20.0	25.0	16.5	20.5	24.0	17.0	20.0	13.5	12.5	13.0
26	23.5	17.5	20.5	24.5	17.5	21.0	25.0	16.0	20.5	17.0	11.5	13.5
27	23.5	18.0	20.5	25.0	18.5	21.5	24.0	17.5	20.5	15.0	9.5	12.0
28	19.5	16.5	18.0	24.0	19.0	21.5	23.0	18.0	20.5	14.5	9.0	12.0
29	18.5	15.0	16.5	22.5	19.5	20.5	23.5	18.5	20.5	13.5	9.5	12.0
30	16.0	13.5	14.5	25.5	18.5	21.0	24.0	19.0	21.0	16.5	11.5	14.0
31	---	---	---	26.0	17.5	21.5	23.5	19.0	21.0	---	---	---
MONTH	23.5	9.0	16.0	27.0	12.5	19.0	28.5	14.0	20.5	25.5	9.0	16.5

01362500 ESOPUS CREEK AT COLDBROOK, NY

LOCATION.--Lat 42°00'51", long 74°16'16", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Coldbrook Road, in Coldbrook, 0.3 mi (0.5 km) downstream from Little Beaver Kill, 1.5 mi (2.4 km) upstream from Ashokan Reservoir, and 2.5 mi (4.0 km) south of Mount Tremper.

DRAINAGE AREA.--192 mi^2 (497 km^2).

PERIOD OF RECORD.—January 1914 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.—Water-stage recorder. Datum of gage is 621.54 ft (189.445 m) National Geodetic Vertical Datum of 1929. Prior to June 15, 1916, nonrecording gage at same site and datum.

REMARKS.—Records fair except those for winter periods, which are poor. Since 1924, water diverted from Schoharie Reservoir through Shandaken Tunnel (see Reservoirs in Hudson River Basin) enters Esopus Creek 10.5 mi (16.9 km) above station and is included in records of daily discharge.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 65,300 ft^3/s (1,850 m^3/s) Mar. 21, 1980, gage height, 21.94 ft (6.687 m), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of slope-area measurements at gage heights 12.39 ft (3.776 m), 15.15 ft (4.618 m), and 20.70 ft (6.309 m); minimum daily, 8 ft^3/s (0.23 m^3/s) Oct. 14, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 65,300 ft^3/s (1,850 m^3/s) Mar. 21, gage height, 21.94 ft (6.687 m) from rating curve extended as explained above; minimum daily, 36 ft^3/s (1.02 m^3/s) Sept. 30; minimum gage height, 3.35 ft (1.021 m) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	857	183	840	417	220	120	995	1410	585	655	249	254
2	1030	207	696	396	200	120	890	1130	568	513	262	242
3	1360	964	584	370	180	120	784	938	483	445	298	211
4	1530	823	521	330	160	150	917	790	488	393	272	196
5	2260	711	468	290	140	220	960	684	602	365	265	193
6	5090	625	429	250	130	600	790	619	849	423	265	187
7	2190	552	401	220	120	900	714	585	911	352	255	173
8	1400	491	355	200	120	760	684	514	876	384	247	165
9	1170	440	322	210	120	831	5490	458	739	384	240	158
10	900	456	299	230	110	742	6540	409	473	349	239	151
11	653	423	282	350	110	742	2510	377	438	337	233	144
12	625	385	270	611	110	704	1700	359	377	340	236	199
13	591	360	262	391	110	682	1340	345	368	321	233	566
14	503	360	246	380	120	682	1150	332	363	316	226	521
15	451	331	231	385	120	689	1810	295	359	329	243	312
16	412	312	231	365	140	674	1410	287	368	498	230	235
17	370	295	274	350	160	848	1140	493	354	939	219	227
18	340	282	246	345	130	4130	974	498	338	932	220	227
19	299	270	231	340	120	2100	836	541	281	921	246	212
20	278	258	280	331	120	1970	721	733	282	910	250	144
21	262	246	270	310	120	22100	636	714	276	679	240	133
22	246	239	270	300	130	15100	563	708	270	288	235	125
23	239	231	217	280	140	2960	509	690	268	278	232	112
24	250	228	228	270	150	1880	463	672	274	266	225	93
25	231	258	625	250	150	1500	419	666	270	261	226	81
26	217	5820	618	250	140	1230	386	648	270	266	264	74
27	207	5070	558	260	140	1010	368	636	289	261	256	63
28	207	2340	527	270	130	904	636	613	292	254	248	48
29	203	1510	503	270	130	1020	2920	608	649	258	253	42
30	197	1080	479	260	---	1290	1920	602	1350	258	271	36
31	190	---	445	240	---	1170	---	591	---	253	261	---
TOTAL	24758	25750	12208	9721	3970	67948	41175	18945	14310	13428	7644	5524
MEAN	799	858	394	314	137	2192	1373	611	477	433	247	184
MAX	5090	5820	840	611	220	22100	6540	1410	1350	939	298	566
MIN	190	183	217	200	110	120	368	287	268	253	219	36

CAL YR 1979 TOTAL 284977 MEAN 781 MAX 7630 MIN 183
WTR YR 1980 TOTAL 245381 MEAN 670 MAX 22100 MIN 36

01364500 ESOPUS CREEK AT MOUNT MARION, NY

LOCATION.--Lat 42°02'16", long 73°58'21", Ulster County, Hydrologic Unit 0200006, on left bank at downstream side of bridge on Glasco Turnpike, 0.8 mi (1.3 km) east of Mount Marion, 1.6 mi (2.6 km) downstream from Plattekill Creek, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--419 mi^2 (1,085 km^2).

PERIOD OF RECORD.--May 1907 to March 1918 (monthly discharge only, published in WSP 1302) occasional miscellaneous measurements, 1951, 1956, 1966, 1967, 1969. March 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.16 ft (12.241 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1970, nonrecording gage at same site (at different datum May 1907 to March 1908, and at present datum June 9, 1966 to Aug. 12, 1970).

REMARKS.--Records fair except those for winter periods, which are poor. Flow from 256 mi^2 (663 km^2) of drainage area regulated by Ashokan Reservoir since Sept. 9, 1913. Water diverted from Schoharie Creek through Shandaken Tunnel (see Reservoirs in Hudson River Basin) since Feb. 3, 1924, enters Esopus Creek about 12.2 mi (31.6 km) above Ashokan Reservoir. Diversion from Plattekill Creek for water supply of village of Saugerties. Diversions upstream during summer months for irrigation purposes. Diversions for water supply of city of New York made from Ashokan Reservoir (see Reservoirs in Hudson River Basin). Discharge records for this station now represent the natural flow from 112 mi^2 (290 km^2), together with spillage during high stages from the upstream reservoirs.

AVERAGE DISCHARGE.--10 years (1971-80), 588 ft^3/s (16.65 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,000 ft^3/s (793 m^3/s) Apr. 26, 1910, gage height, 25.10 ft (7.650 m), datum then in use; minimum, 9.7 ft^3/s (0.27 m^3/s) Sept. 16, 17, 1980, gage height, 11.79 ft (3.594 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,500 ft^3/s (552 m^3/s) Mar. 22, gage height, 24.31 ft (7.410 m); minimum discharge, 9.7 ft^3/s (0.27 m^3/s) Sept. 16, 17, gage height, 11.79 ft (3.594 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	114	421	245	71	54	568	1300	71	168	20	13
2	1090	113	354	224	70	51	478	1000	65	115	20	13
3	1090	425	304	211	64	48	417	800	62	94	34	12
4	2050	588	274	177	61	49	464	660	61	81	33	12
5	1110	459	252	165	58	50	700	540	56	72	28	12
6	2560	371	238	151	57	55	851	450	52	92	35	14
7	1250	318	236	135	56	57	726	370	69	81	43	14
8	759	281	217	139	56	89	635	320	76	71	37	13
9	615	248	193	128	54	152	1780	280	65	92	29	12
10	541	256	179	119	54	150	9130	240	62	82	22	11
11	447	274	173	121	52	171	9570	220	57	70	22	11
12	407	261	167	304	52	161	5020	230	54	62	21	11
13	451	241	161	243	52	137	3230	221	50	55	19	10
14	380	235	163	219	50	137	2270	208	47	49	18	11
15	333	227	152	214	50	141	2280	193	45	44	20	11
16	290	210	145	201	50	127	1400	169	72	42	22	10
17	259	196	187	182	50	136	980	149	62	37	19	10
18	236	192	170	175	49	1890	660	134	50	34	17	19
19	215	177	144	171	49	1250	500	146	44	31	16	23
20	200	169	138	165	49	869	430	146	42	29	23	22
21	191	166	141	154	50	4580	380	131	40	27	28	18
22	173	157	146	146	58	12800	340	128	36	29	23	16
23	160	151	151	142	70	3670	320	120	34	32	20	14
24	157	147	168	122	81	1670	290	109	32	31	18	12
25	160	149	428	107	82	1420	270	99	30	29	16	13
26	145	989	664	108	81	1080	260	89	29	27	16	16
27	138	2630	523	102	69	814	250	81	26	26	16	15
28	133	1140	416	101	69	657	1500	87	24	24	15	14
29	132	716	351	97	60	607	6000	89	27	23	14	13
30	124	529	309	87	---	815	2500	78	303	24	14	13
31	119	---	276	76	---	696	---	72	---	24	13	---
TOTAL	16236	12129	7841	4931	1724	34583	54199	8859	1743	1697	691	408
MEAN	524	404	253	159	59.4	1116	1807	286	58.1	54.7	22.3	13.6
MAX	2560	2630	664	304	82	12800	9570	1300	303	168	43	23
MIN	119	113	138	76	49	48	250	72	24	23	13	10

CAL YR 1979 TOTAL 183390 MEAN 502 MAX 3880 MIN 34
WTR YR 1980 TOTAL 145041 MEAN 396 MAX 12800 MIN 10

01365000 RONDOUT CREEK NEAR LOWES CORNERS, NY

LOCATION.--Lat 41°52'00", long 74°29'12", Sullivan County, Hydrologic Unit 02020007, on left bank 100 ft (30 m) downstream from small tributary, 350 ft (107 m) upstream from bridge on county road, 1.1 mi (1.8 km) upstream from Sugarloaf Brook, 1.1 mi (1.8 km) east of Lowes Corners, and 1.9 mi (3.1 km) southwest of Sundown.

DRAINAGE AREA.--38.5 mi^2 (99.7 km^2).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 1702: 1952.

GAGE.--Water-stage recorder. Datum of gage is 874.44 ft (266.529 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1938, nonrecording gage at highway bridge 350 ft (107 m) downstream at datum 847.00 ft (258.166 m) NGVD (levels by Board of Water Supply, City of New York). Oct. 4, 1938 to July 5, 1951, water-stage recorder at site 1.2 mi (1.9 km) downstream; Oct. 4, 1938 to July 3, 1949, datum 847.00 ft (258.166 m) NGVD and July 4, 1949 to July 5, 1951, datum 846.00 ft (257.861 m) NGVD (levels by Board of Water Supply, City of New York).

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--43 years, 98.8 ft^3/s (2.798 m^3/s), 34.85 in/yr (885 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,600 ft^3/s (215 m^3/s) July 22, 1938, from rating curve extended above 2,600 ft^3/s (73.6 m^3/s); maximum gage height, 10.5 ft (3.200 m) Mar. 21, 1980; minimum discharge, 3.3 ft^3/s (0.09 m^3/s) Sept. 16, 17, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	2015	1,750	49.6	6.05	1.844	Mar. 21	1600	*6,800	193	*10.5	3.200
Nov. 26	1700	1,430	40.5	5.70	1.737	Apr. 10	0230	2,300	65.1	5.82	1.774

Minimum discharge, 3.3 ft^3/s (0.09 m^3/s) Sept. 16, 17; minimum gage height, 1.98 ft (0.604 m), July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	53	186	83	22	18	140	200	34	28	12	7.0
2	231	83	163	81	23	17	130	170	32	23	23	6.4
3	208	263	140	76	23	15	130	150	31	22	40	6.4
4	200	157	129	66	23	17	150	140	30	21	22	6.0
5	454	133	112	70	23	17	170	130	28	21	16	6.8
6	613	122	106	61	21	17	130	130	27	33	15	7.9
7	380	115	102	61	23	20	120	120	60	22	13	6.4
8	280	109	94	58	22	48	250	110	45	19	11	5.9
9	324	100	86	53	22	55	500	100	35	19	10	5.8
10	263	140	81	48	21	31	700	98	30	17	9.7	6.5
11	219	122	76	58	20	35	300	98	28	17	11	5.2
12	263	106	70	94	20	24	200	100	26	17	11	4.6
13	259	100	66	55	21	21	140	120	25	16	10	4.4
14	212	102	61	58	21	24	130	120	24	15	9.5	4.4
15	190	94	55	58	21	22	300	100	23	15	15	4.2
16	166	94	58	53	22	21	250	94	37	15	12	3.6
17	149	88	78	51	20	64	200	88	24	15	9.5	4.6
18	133	88	55	51	20	537	160	110	22	14	8.6	12
19	118	78	48	51	21	236	140	130	22	13	8.5	7.2
20	109	76	51	48	20	197	130	100	23	13	8.0	6.3
21	100	73	48	44	22	2020	120	80	22	15	7.6	6.0
22	91	70	51	44	21	1130	120	68	21	17	7.2	5.4
23	86	66	51	43	22	500	110	60	20	19	7.0	5.5
24	91	70	64	31	22	350	100	56	19	12	6.6	5.3
25	81	83	163	35	20	270	96	52	18	8.8	6.2	5.4
26	73	525	115	38	20	190	92	47	18	7.5	5.8	12
27	66	505	100	37	18	160	120	46	17	7.0	5.5	8.0
28	70	359	94	36	19	140	350	43	16	6.8	5.5	6.9
29	66	276	94	33	17	150	400	39	26	8.0	5.5	6.6
30	61	219	91	26	---	200	280	37	59	9.1	5.5	6.3
31	55	---	88	27	---	170	---	36	---	7.3	6.1	---
TOTAL	5826	4469	2776	1628	610	6716	6158	2972	842	492.5	343.3	189.0
MEAN	188	149	89.5	52.5	21.0	217	205	95.9	28.1	15.9	11.1	6.30
MAX	613	525	186	94	23	2020	700	200	60	33	40	12
MIN	55	53	48	26	17	15	92	36	16	6.8	5.5	3.6
CFSM	4.88	3.87	2.33	1.36	.55	5.64	5.33	2.49	.73	.41	.29	.16
IN.	5.63	4.32	2.68	1.57	.59	6.49	5.95	2.87	.81	.48	.33	.18

CAL YR 1979 TOTAL 49561.0 MEAN 136 MAX 1090 MIN 20 CFSM 3.53 IN 47.89
WTR YR 1980 TOTAL 33021.8 MEAN 90.2 MAX 2020 MIN 3.6 CFSM 2.34 IN 31.91

01365500 CHESTNUT CREEK AT GRAHAMSVILLE, NY

LOCATION.--Lat 41°50'42", long 74°32'27", Sullivan County, Hydrologic Unit 02020007, on right bank just downstream from bridge in Grahamsville, 600 ft (183 m) downstream from Red Brook, and 0.6 mi (1.0 km) upstream from bridge on State Highway 55.

DRAINAGE AREA.--20.9 mi^2 (54.1 km^2).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 880.96 ft (268.516 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Slight seasonal regulation caused by Beaverdam Pond on Red Brook.

AVERAGE DISCHARGE.--42 years, 39.4 ft^3/s (1.116 m^3/s), 25.60 in/yr (650 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 ft^3/s (131 m^3/s) Oct. 15, 1955, gage height, 5.02 ft (1.530 m), from rating curve extended above 1,300 ft^3/s (36.8 m^3/s) on basis of slope-area measurement at gage height 4.68 ft (1.426 m); minimum, 1.4 ft^3/s (0.040 m^3/s) Nov. 1, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s (14 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	2115	800	22.7	2.36	0.719
Nov. 26	1615	810	22.9	2.35	0.716
Mar. 21	1715	*1,830	51.8	*3.17	0.966

Minimum discharge, 2.8 ft^3/s (0.08 m^3/s) Sept. 17, 22, 23, 24, 25; minimum gage height, 0.49 ft (0.149 m) Sept. 12, 17, 22, 23, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	21	57	28	14	10	82	83	15	23	5.7	3.9
2	80	40	51	27	13	9.4	72	68	14	19	16	4.2
3	69	134	43	25	13	8.6	65	57	14	21	24	4.5
4	61	70	41	22	13	8.0	122	48	13	18	8.8	3.8
5	172	52	38	23	12	7.8	90	43	12	17	7.3	4.1
6	203	44	36	19	12	8.0	70	39	11	24	6.9	5.0
7	106	40	37	21	12	9.0	61	39	20	13	6.2	3.7
8	78	39	34	20	12	11	57	34	17	11	5.9	3.5
9	97	36	30	18	11	35	213	31	14	11	5.6	3.4
10	75	51	30	17	11	27	304	28	14	11	5.4	3.8
11	62	44	28	20	11	22	169	30	13	10	6.0	3.4
12	76	39	28	28	11	19	112	32	12	9.0	5.4	3.3
13	69	36	29	19	11	17	92	31	11	8.4	4.9	3.4
14	55	37	28	20	10	16	90	32	11	7.9	4.9	3.5
15	48	34	26	20	10	14	140	27	11	7.2	8.4	3.4
16	43	34	29	19	10	13	96	23	12	7.2	5.6	3.4
17	39	33	38	19	10	16	74	22	10	7.2	5.0	4.2
18	36	32	27	19	9.8	190	63	44	9.7	6.6	4.9	5.9
19	33	30	24	19	9.6	150	54	43	9.7	6.3	5.0	3.6
20	32	28	25	18	9.6	120	47	30	10	6.0	5.1	3.3
21	29	28	25	17	9.4	566	42	27	9.7	6.0	5.1	3.2
22	25	28	25	16	9.2	771	37	24	9.1	10	4.6	3.1
23	24	26	26	17	9.0	339	36	22	8.6	10	4.6	3.0
24	27	25	36	17	8.8	151	33	20	8.6	7.0	4.3	2.9
25	24	34	92	18	8.6	139	31	18	8.1	6.2	4.5	3.0
26	23	251	59	17	9.0	107	29	17	8.1	5.8	4.2	6.3
27	22	197	44	16	10	91	34	15	7.6	5.6	4.3	3.7
28	25	119	37	15	11	84	127	15	7.6	5.4	4.1	3.3
29	24	84	34	15	12	136	174	14	36	5.5	4.0	3.3
30	23	67	33	14	---	145	115	14	60	5.6	4.0	3.3
31	22	---	30	14	---	108	---	14	---	5.1	3.9	---
TOTAL	1811	1733	1120	597	312.0	3347.8	2731	984	416.8	316.0	194.6	112.4
MEAN	58.4	57.8	36.1	19.3	10.8	108	91.0	31.7	13.9	10.2	6.28	3.75
MAX	203	251	92	28	14	771	304	83	60	24	24	6.3
MIN	22	21	24	14	8.6	7.8	29	14	7.6	5.1	3.9	2.9
CFSM	2.79	2.77	1.73	.92	.52	5.17	4.35	1.52	.67	.49	.30	.18
IN.	3.22	3.08	1.99	1.06	.56	5.96	4.86	1.75	.74	.56	.35	.20

CAL YR 1979 TOTAL 17634.1 MEAN 48.3 MAX 417 MIN 5.5 CFSM 2.31 IN 31.39
WTR YR 1980 TOTAL 13675.6 MEAN 37.4 MAX 771 MIN 2.9 CFSM 1.79 IN 24.34

01367500 RONDOUT CREEK AT ROSENDALE, NY

LOCATION.--Lat 41°50'35", long 74°05'11", Ulster County, Hydrologic Unit 02020007, on left bank 30 ft (9 m) upstream from bridge on James Street in Rosendale, and 3 mi (5 km) upstream from Wallkill River.

DRAINAGE AREA.--386 mi^2 (1,000 km^2) (see REMARKS below).

PERIOD OF RECORD.--July 1901 to November 1903, October 1905 to January 1919, August 1926, to current year. Monthly discharge only for some periods, published in WSP 1302, and WRD NY 1970.

REVISED RECORDS.--WSP 641: Drainage Area. WSP 756: 1933.

GAGE.--Water-stage recorder. Datum of gage is 32.83 ft (10.007 m) National Geodetic Vertical Datum of 1929. Prior to January 1919, nonrecording gage at site 150 ft (46 m) downstream at datum 38.83 ft (11.835 m) NGVD. Aug. 3, 1926 to Sept. 10, 1969, at present site at datum 42.83 ft (13.055 m) NGVD. Sept. 11, 1969 to Feb. 3, 1970, water-stage recorder, and June 9, 1970 to Jan. 18, 1971, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 44.03 ft (13.420 m) NGVD.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation from hydroelectric plant upstream from station. Diversion from Rondout Creek through the emergency connection to the Delaware Aqueduct at Lackawack for New York City water supply during period April 1944 to May 1951. Since October 1950, flow regulated by Rondout Reservoir (see Reservoirs in Hudson River Basin). Subsequent to May 1951, entire flow except for period of spilling, diverted from Rondout Reservoir for New York City water supply. Discharge records for this station now represent the natural flow from 272 mi^2 (704 km^2), together with spillage during high flow from Rondout Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,800 ft^3/s (1,010 m^3/s) Oct. 16, 1955, gage height, 36.8 ft (11.22 m), datum then in use, from floodmarks, from rating curve extended above 15,000 ft^3/s (425 m^3/s) on basis of contracted-opening measurement at gage height 33.93 ft (10.342 m); minimum, 2.2 ft^3/s (0.062 m^3/s) July 16, 1965; minimum daily, 3.0 ft^3/s (0.085 m^3/s) July 16, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,600 ft^3/s (668 m^3/s) Mar. 22, gage height, 22.47 ft (6.849 m); minimum, 22 ft^3/s (0.62 m^3/s) Sept. 3, 4, gage height, 8.61 ft (2.624 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	620	219	791	360	140	115	1310	1620	146	333	46	25
2	2360	218	680	350	135	110	1130	1230	143	245	56	24
3	1440	1330	487	334	135	105	945	981	141	232	83	22
4	1360	1310	436	283	130	105	1200	708	143	148	87	22
5	1100	825	407	260	125	105	1280	593	135	107	70	23
6	2990	662	382	230	125	110	936	528	110	175	64	25
7	1490	584	448	210	120	121	791	489	122	178	66	26
8	1070	516	431	200	115	212	710	458	180	117	58	25
9	891	466	345	190	115	417	3090	426	193	102	51	24
10	831	491	311	180	110	294	6410	391	149	104	48	24
11	744	597	297	220	105	397	3040	370	122	99	48	23
12	552	498	287	445	105	283	1980	417	112	122	47	23
13	612	464	288	374	105	210	1540	446	103	121	47	23
14	501	456	303	277	105	174	1210	446	96	80	44	23
15	425	440	272	267	105	170	1730	389	94	66	47	24
16	383	403	271	262	110	165	1390	330	112	51	48	23
17	353	374	359	244	120	160	1060	294	112	48	43	26
18	333	355	296	229	130	2070	867	282	91	48	40	43
19	323	307	260	232	130	1580	702	395	81	47	39	41
20	304	285	250	255	120	1130	610	343	83	44	40	35
21	293	274	250	217	120	5540	551	306	85	43	38	31
22	279	262	260	202	125	19100	483	353	87	176	38	29
23	265	258	270	190	150	5590	447	293	81	103	36	28
24	263	250	313	180	170	2930	414	255	70	83	35	28
25	271	284	1140	170	160	2830	382	221	66	66	33	27
26	248	1220	1180	170	150	2210	363	203	59	56	32	30
27	236	3520	796	160	140	1810	357	183	61	48	30	30
28	233	1750	682	160	130	1360	948	170	54	46	28	30
29	255	1300	596	155	120	1430	4340	155	63	46	26	30
30	246	945	541	150	---	1980	2300	146	410	47	25	30
31	229	---	413	145	---	1590	---	141	---	47	25	---
TOTAL	21500	20863	14042	7301	3650	54403	42516	13562	3504	3228	1418	817
MEAN	694	695	453	236	126	1755	1417	437	117	104	45.7	27.2
MAX	2990	3520	1180	445	170	19100	6410	1620	410	333	87	43
MIN	229	218	250	145	105	105	357	141	54	43	25	22

CAL YR 1979 TOTAL 278111 MEAN 762 MAX 8100 MIN 51
WTR YR 1980 TOTAL 186804 MEAN 510 MAX 19100 MIN 22

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'56", Sussex County, New Jersey, Hydrologic Unit 02020007, on right bank on downstream side of bridge on the Bassetts Bridge Road, 0.6 mi (1.0 km) upstream from small tributary, 2.0 mi (3.2 km) south of the New York-New Jersey State line, and 3.0 mi (4.8 km) south of Unionville.

DRAINAGE AREA.--140 mi^2 (363 km^2).

PERIOD OF RECORD.--September 1937 to current year.

REVISED RECORDS.--WSP 2102: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 379.28 ft (115.605 m) National Vertical Geodetic Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor, and periods of recession above 600 ft^3/s (17 m^3/s), which may be as much as 35 percent in error. Water diverted from Morris Lake, upstream from station, by the Newton Water and Sewer Authority for municipal use in New Jersey. After use, the water is released into Paulins Kill (Delaware River basin). Diversion records available from the Delaware River Basin Commission.

AVERAGE DISCHARGE.--43 years, 217 ft^3/s (6.145 m^3/s), 21.05 in/yr (535 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,880 ft^3/s (195 m^3/s) Aug. 19, 1955, gage height, 13.35 ft (4.069 m); minimum daily, 4.2 ft^3/s (0.12 m^3/s) Aug. 8-10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft^3/s (34.0 m^3/s):

		Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Mar. 23	1745	1,420	40.2	8.19	2.496

Minimum daily discharge, 13 ft^3/s (0.37 m^3/s) Sept. 13, 14; minimum gage height, 2.89 ft (0.881 m), Sept. 13, 14, 15, 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	117	263	194	64	60	764	800	84	155	46	16
2	518	110	230	184	62	56	833	613	94	83	36	16
3	536	274	205	175	60	52	780	434	110	83	69	15
4	471	476	194	150	58	54	700	359	150	74	74	16
5	390	415	188	140	58	61	766	304	118	64	45	16
6	410	315	180	130	56	67	640	268	84	185	34	17
7	375	249	211	122	56	74	541	245	77	134	30	19
8	290	215	222	128	54	97	445	238	83	76	27	17
9	239	200	199	116	54	151	459	230	89	59	24	15
10	271	226	175	102	54	136	674	206	94	51	24	15
11	356	297	165	120	54	192	804	192	97	44	22	14
12	333	302	163	334	52	175	660	214	81	59	30	14
13	304	288	177	317	52	121	540	251	69	65	33	13
14	265	260	243	243	52	82	482	236	61	43	25	13
15	226	238	211	211	50	134	556	196	56	35	23	14
16	206	215	175	206	52	119	555	169	52	34	24	19
17	190	197	222	179	52	117	465	151	49	47	22	25
18	180	185	170	169	54	485	391	138	45	48	22	62
19	168	176	140	193	56	791	343	139	44	39	21	53
20	156	166	137	194	60	640	310	138	43	32	21	29
21	144	163	146	165	62	538	285	139	49	28	26	21
22	137	158	163	147	66	997	263	178	57	27	24	20
23	131	153	165	146	70	1340	237	149	40	47	22	19
24	130	153	207	128	74	1300	217	126	36	87	21	18
25	132	148	328	100	80	1100	203	113	34	50	20	17
26	120	197	437	94	76	960	194	98	33	36	19	17
27	111	458	351	90	72	820	187	86	30	29	19	16
28	116	497	282	86	70	700	311	77	29	26	18	16
29	169	416	247	82	66	600	713	70	31	29	17	15
30	152	321	228	78	---	704	946	65	207	85	17	15
31	130	---	211	72	---	715	---	70	---	72	16	---
TOTAL	7577	7585	6635	4795	1746	13438	15264	6692	2126	1926	871	592
MEAN	244	253	214	155	60.2	433	509	216	70.9	62.1	28.1	19.7
MAX	536	497	437	334	80	1340	946	800	207	185	74	62
MIN	111	110	137	72	50	52	187	65	29	26	16	13
CFSM	1.74	1.81	1.53	1.11	.43	3.09	3.64	1.54	.51	.44	.20	.14
IN.	2.01	2.02	1.76	1.27	.46	3.57	4.06	1.78	.56	.51	.23	.16

CAL YR 1979 TOTAL 112661 MEAN 309 MAX 2730 MIN 31 CFSM 2.21 IN 29.94
WTR YR 1980 TOTAL 69247 MEAN 189 MAX 1340 MIN 13 CFSM 1.35 IN 18.40

01371500 WALLKILL RIVER AT GARDINER, NY

LOCATION.--Lat 41°41'10", long 74°09'56", Ulster County, Hydrologic Unit 02020007, on left bank 400 ft (122 m) upstream from bridge on U.S. Highway 44, 500 ft (152 m) downstream from Shawangunk Kill, and 0.7 mi (1.1 km) northwest of Gardiner.

DRAINAGE AREA.--711 mi^2 (1,841 km^2).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.70 ft (56.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--56 years, 1,059 ft^3/s (30.00 m^3/s), 20.23 in/yr (514 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft^3/s (872 m^3/s) Oct. 16, 1955, gage height, 19.81 ft (6.038 m); minimum, 9.5 ft^3/s (0.27 m^3/s) Sept. 28, 1964; minimum gage height, 1.59 ft (0.48 m) Aug. 14, 15, 16, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,400 ft^3/s (181 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0730	*14,600	413	*12.92	3.938
Apr. 10	0730	6,790	192	8.49	2.588
Apr. 29	0430	6,500	184	8.30	2.530

Minimum discharge, 44 ft^3/s (1.25 m^3/s), Sept. 13, 14, gage height, 1.85 ft (0.564 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1700	511	1400	881	270	260	4160	3580	264	710	143	55
2	3860	475	1170	801	260	250	3970	2980	281	457	137	49
3	2920	1590	1010	680	250	250	3540	2370	313	338	134	47
4	2790	2640	906	600	240	250	3740	1800	402	314	129	48
5	2310	1990	849	520	230	250	3860	1420	435	278	152	55
6	2930	1520	809	480	220	260	3220	1210	351	370	159	65
7	2130	1250	873	440	215	280	2770	1070	366	620	145	69
8	1650	1070	914	410	210	350	2350	991	397	439	120	62
9	1300	940	825	390	210	680	3430	940	356	320	106	56
10	1160	1040	741	380	205	600	6140	849	341	261	96	56
11	1400	1400	697	370	205	640	4460	771	336	219	94	53
12	1430	1520	661	420	200	520	3750	857	317	188	89	48
13	1420	1440	661	780	200	450	3210	1030	281	170	85	45
14	1230	1260	809	660	200	420	2790	1080	247	174	86	46
15	1040	1130	849	600	200	450	3090	873	223	155	99	47
16	914	1000	748	560	200	500	2830	711	204	138	90	48
17	833	906	580	520	210	574	2390	613	190	138	82	53
18	763	825	480	490	220	3620	1980	574	176	144	78	161
19	711	763	460	470	230	4300	1680	580	166	142	76	249
20	661	718	460	440	250	3350	1430	554	156	133	75	176
21	613	689	460	420	260	4800	1270	535	153	123	71	127
22	587	668	470	400	270	13000	1120	661	147	141	72	101
23	554	647	520	380	280	8100	1010	647	150	130	75	85
24	548	627	873	360	300	6300	923	535	144	138	75	76
25	535	633	2650	350	310	6450	849	458	126	159	72	70
26	523	1180	2830	340	310	5640	801	402	114	149	69	74
27	487	3000	2030	320	290	4690	771	351	108	124	65	69
28	469	2380	1550	310	280	3900	1750	308	100	109	59	65
29	542	2040	1260	300	270	3670	5750	281	105	105	56	65
30	613	1720	1120	290	---	4110	4430	264	468	104	55	65
31	561	---	1000	280	---	3700	---	251	---	102	53	---
TOTAL	39184	37572	30665	14642	6995	82614	83464	29546	7417	7092	2897	2285
MEAN	1264	1252	989	472	241	2665	2782	953	247	229	93.5	76.2
MAX	3860	3000	2830	881	310	13000	6140	3580	468	710	159	249
MIN	469	475	460	280	200	250	771	251	100	102	53	45

CAL YR 1979 TOTAL 524987 MEAN 1438 MAX 14000 MIN 113
WTR YR 1980 TOTAL 344373 MEAN 941 MAX 13000 MIN 45

01372035 HUDSON RIVER AT STAATSBURG, NY

LOCATION.--Lat 41°50'06", long 73°56'34", Dutchess-Ulster Counties, Hydrologic Unit 02020008, 0.3 mi (0.5 km) upstream from the stage gage at Norrie Yacht Basin in Norrie State Park at mouth of Indian Kill, and 1.1 mi (1.8 km) southwest of Staatsburg.

DRAINAGE AREA.--11,629 mi² (30,119 km²).

PERIOD OF RECORD.--Water year 1978 to current year.
MINOR ELEMENT DATA: 1978-79 (c).
PESTICIDE DATA: 1978-79 (c).
ORGANIC DATA: PCB--1978-79 (c), 1980 (b).
PCN--1978-79 (c).
NUTRIENT DATA: 1978 (c), 1979 (a).
SEDIMENT DATA: 1978 (b), 1979 (c), 1980 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	SOLIDS, NON-VOLA-TILE, SUS-PENDED (MG/L)	PCB, DIS-SOLVED (UG/L)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)
JUN							
26...	1530	8	4	4	.3	--	12
JUL							
09...	1530	17	4	13	--	.3	32
29...	1430	20	8	12	--	--	30
AUG							
14...	1300	0	0	0	--	.1	28
26...	1400	13	10	3	--	.1	19

01372059 HUDSON RIVER AT CLINTON POINT NEAR NEW HAMBURG, NY

LOCATION.--Lat 41°37'27", long 73°56'55", Dutchess-Ulster Counties, Hydrologic Unit 02020008, opposite northernmost building of New York Trap Rock Corporation's crushing plant, 600 ft (183 m) downstream from stage gage, 2.3 mi (3.7 km) north of New Hamburg, and 2.8 mi (4.5 km) upstream from Wappinger Creek.

DRAINAGE AREA.--11,745 mi² (30,420 km²).

PERIOD OF RECORD.--Water years 1964, 1965, 1978 to current year.
CHEMICAL DATA: 1964-65 (a).
MINOR ELEMENT DATA: 1978-79 (c).
PESTICIDE DATA: 1978-79 (c).
ORGANIC DATA: PCB--1978-79 (c), 1980 (b).
PCN--1978-79 (c).
NUTRIENT DATA: 1978 (c), 1979 (a).
SEDIMENT DATA: 1978-79 (c), 1980 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

*DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	SOLIDS, NON-VOLATILE, SUSPENDED (MG/L)	PCB, DISSOLVED (UG/L)	PCB, TOTAL (UG/L)	SEDIMENT, SUSPENDED (MG/L)
JUN							
26...	1215	14	5	9	.0	--	20
JUL							
09...	1300	35	6	29	--	.4	34
29...	1245	10	3	7	--	--	12
AUG							
14...	1100	6	0	6	--	.1	19
26...	1130	12	10	2	--	.2	20

01372500 WAPPINGER CREEK NEAR WAPPINGERS FALLS, NY

LOCATION.--Lat 41°39'11", long 73°52'23", Dutchess County, Hydrologic Unit 02020008, on left bank 700 ft (213 m) downstream from Red Oak Mill dam, and 4.5 mi (7.2 km) northeast of village of Wappingers Falls.

DRAINAGE AREA.--181 mi^2 (469 km^2).

PERIOD OF RECORD.--May 1903 to June 1905 (gage heights only during some winter months), August 1928 to current year.

REVISED RECORDS.--WSP 741: 1932. WSP 1902: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 114.37 ft (34.860 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). May 1903 to June 1905 staff gage at site 2.5 mi (4.0 km) downstream at different datum. Aug. 7, 1928 to Sept. 25, 1931, water-stage recorder at site 2 mi (3 km) downstream at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--52 years (1929-80), 254 ft^3/s (7.193 m^3/s), 19.06 in/yr (484 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft^3/s (527 m^3/s) Aug. 19, 1955, gage height, 19.60 ft (5.974 m), from floodmarks in gage shelter, from rating curve extended above 5,000 ft^3/s (140 m^3/s) on basis of flow-over-dam and contracted-opening measurement at gage height 18.02 ft (5.492 m) and contracted-opening and flow-over-road measurement at gage height 19.60 ft (5.974 m); minimum, 0.90 ft^3/s (0.025 m^3/s) Sept. 20, 21, 1964, gage height, 2.05 ft (0.625 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	1830	*3,650	103	*8.51	2.594	Apr. 10	1345	1,590	45.0	6.02	1.835

Minimum discharge, 8.4 ft^3/s (0.238 m^3/s) Sept. 16, 17, gage height, 2.35 ft (0.716 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	119	307	242	95	86	755	455	80	150	29	16
2	394	123	277	232	89	76	651	403	79	104	29	16
3	403	284	245	232	83	66	596	359	82	94	35	14
4	922	417	232	196	85	62	689	318	77	80	38	14
5	632	307	226	188	83	66	762	288	70	70	33	13
6	1100	256	222	164	76	68	620	270	65	128	31	14
7	826	229	299	162	70	72	539	256	80	99	28	15
8	585	213	284	162	69	123	491	263	102	77	26	14
9	450	199	235	143	70	252	523	249	86	74	24	12
10	412	245	210	133	66	177	1310	226	77	64	22	10
11	417	314	201	154	65	280	1120	207	72	61	22	10
12	363	322	196	326	69	242	890	222	68	51	22	9.6
13	355	303	196	245	64	174	762	232	62	44	24	9.6
14	307	288	204	204	64	167	683	235	60	37	22	9.6
15	270	270	188	196	66	162	749	204	54	34	23	9.2
16	245	252	180	190	57	141	645	182	83	32	22	8.7
17	222	235	239	174	74	162	556	164	100	29	22	9.2
18	207	222	199	167	82	877	491	152	77	29	21	29
19	201	210	172	169	77	804	445	159	66	26	18	32
20	185	199	167	167	72	562	408	147	60	25	120	22
21	174	188	164	157	73	639	372	145	54	26	74	18
22	164	182	174	147	79	2930	334	172	52	141	50	14
23	154	177	177	145	86	2480	311	150	47	100	36	13
24	159	174	201	125	109	1640	291	133	43	77	29	12
25	159	180	355	121	109	1530	273	119	42	60	25	11
26	143	252	491	119	109	1300	259	104	40	46	22	12
27	133	545	399	111	85	1050	245	94	36	39	21	11
28	130	436	343	109	95	890	334	92	33	34	19	11
29	133	376	314	100	79	818	651	88	42	33	18	11
30	127	338	295	88	---	903	567	83	219	33	18	9.9
31	119	---	270	92	---	852	---	80	---	33	17	---
TOTAL	10236	7855	7662	5160	2300	19651	17322	6251	2108	1930	940	409.8
MEAN	330	262	247	166	79.3	634	577	202	70.3	62.3	30.3	13.7
MAX	1100	545	491	326	109	2930	1310	455	219	150	120	32
MIN	119	119	164	88	57	62	245	80	33	25	17	8.7
CFSM	1.82	1.45	1.37	.92	.44	3.50	3.19	1.12	.39	.34	.17	.08
IN.	2.10	1.61	1.57	1.06	.47	4.04	3.56	1.28	.43	.40	.19	.08

CAL YR 1979 TOTAL 132228.0 MEAN 362 MAX 3160 MIN 17 CFSM 2.00 IN 27.18
WTR YR 1980 TOTAL 81824.8 MEAN 224 MAX 2930 MIN 8.7 CFSM 1.24 IN 16.82

01374023 HUDSON RIVER AT HIGHLAND FALLS, NY

LOCATION.--Lat 41°22'13", long 73°57'29", Orange County, Hydrologic Unit 02020008, in Highland Falls, 0.1 mi (0.2 km) upstream from Highland Brook and 1.0 mi (1.6 km) downstream from West Point South Dock.

PERIOD OF RECORD.--October 1978 to current year.
MINOR ELEMENT DATA: 1979 (c).
PESTICIDE DATA: 1979 (c).
ORGANIC DATA: PCB--1979 (c), 1980 (b).
PCN--1979 (c).
NUTRIENT DATA: 1979 (a).
SEDIMENT DATA: 1979 (c), 1980 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	SOLIDS, NON-VOLA-TILE, SUS-PENDED (MG/L)	PCB, DIS-SOLVED (UG/L)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)
JUN							
26...	0930	29	13	16	.0	--	29
JUL							
09...	1000	21	7	14	--	.1	39
29...	1100	26	4	22	--	.0	31
AUG							
14...	0900	2	2	0	--	.2	39
26...	1015	15	11	4	--	.1	22

01375000 CROTON RIVER AT NEW CROTON DAM, NEAR CROTON-ON-HUDSON, NY

LOCATION.--Lat 41°13'32", long 73°51'32", Westchester County, Hydrologic Unit 02030101, on left bank 1,000 ft (305 m) downstream from New Croton Dam, and 1.8 mi (2.9 km) northeast of Croton-On-Hudson.

DRAINAGE AREA.--378 mi^2 (979 km^2).

PERIOD OF RECORD.--August 1933 to current year. Prior to Oct. 1, 1941, published as "at Quaker Bridge," (low-flow records at this site are not equivalent owing to well pumpage upstream). Fragmentary records published during August 1933 to September 1941 for "at Cornell Dam near Croton" and "at New Croton near Croton" are equivalent. Oct. 1, 1941 to Sept. 30, 1955 published as "at New Croton Dam near Croton".

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 50 ft (15 m), from topographic map. Prior to Oct. 1, 1941, supplementary water-stage rcorder and concrete control at site 1.1 mi (1.8 km) downstream at Quaker Bridge.

REMARKS.--Records fair. Entire flow, except for periods of spilling and releases to augment Croton-on-Hudson water supply, diverted from New Croton Reservoir for municipal supply of City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,400 ft^3/s (1,290 m^3/s) Oct. 16, 1955, gage height, 18.44 ft (5.621 m), from floodmarks, from rating curve extended above 9,700 ft^3/s (275 m^3/s) on basis of slope-area measurements of peak flow; minimum daily, 0.1 ft^3/s (0.003 m^3/s) Mar. 14, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,460 ft^3/s (268 m^3/s) Apr. 10, gage height, 9.12 ft (2.780 m); minimum daily, 0.35 ft^3/s (0.010 m^3/s) Jun. 19; minimum gage height, 0.40 ft (0.122 m) Jun. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	89	531	531	491	4.7	1830	1100	2.2	64	15	7.2
2	674	68	539	531	499	4.7	1470	918	17	45	15	7.2
3	655	279	539	531	499	4.7	1480	756	49	16	21	7.5
4	846	454	539	531	491	4.7	1470	608	89	37	24	7.5
5	539	310	531	531	491	4.7	1790	484	56	38	15	7.7
6	714	212	531	531	491	4.7	1430	426	12	38	15	8.2
7	469	172	539	531	491	4.6	1420	393	14	38	15	8.2
8	315	150	531	531	484	2.3	1330	636	49	27	15	8.5
9	251	132	539	523	484	.88	1900	674	54	14	15	8.5
10	344	160	531	523	484	1.2	8130	491	60	14	15	8.5
11	476	220	539	523	484	2.1	4950	393	38	14	15	8.8
12	433	491	531	523	469	.83	3310	426	15	14	15	8.5
13	393	484	531	523	469	.78	2480	491	2.0	14	15	8.5
14	315	399	531	523	469	1.0	2130	461	.59	13	15	8.5
15	246	367	531	523	470	.94	2380	367	.68	8.0	15	8.5
16	216	412	531	523	330	.88	1960	305	2.5	9.6	14	8.5
17	197	556	531	523	230	1.1	1570	255	.73	14	9.1	8.5
18	208	556	531	523	233	2.5	1360	233	.68	14	9.1	8.8
19	233	556	531	523	233	1.4	1210	233	.35	13	9.3	8.5
20	197	547	531	523	233	1.3	1110	225	14	14	9.6	8.5
21	168	547	523	523	201	11	983	279	26	14	9.6	8.2
22	155	547	531	523	25	2070	834	433	23	14	8.2	8.2
23	141	547	531	523	5.1	7440	655	344	23	15	7.2	8.5
24	116	547	531	523	4.9	4730	564	269	23	14	7.2	8.5
25	102	547	531	515	4.9	3680	531	216	23	14	7.2	8.5
26	72	547	531	515	4.7	2780	469	132	64	14	7.2	8.5
27	61	547	531	523	4.7	2140	469	57	89	15	7.2	8.2
28	72	539	531	523	4.7	1730	918	29	89	15	7.2	8.2
29	98	531	531	507	4.7	1600	1570	14	89	14	7.2	8.2
30	116	523	531	484	---	1590	1280	1.7	89	15	7.2	8.2
31	112	---	531	484	---	1600	---	.78	---	15	7.2	---
TOTAL	9199	12036	16501	16167	8784.7	29421.01	52983	11650.48	1014.73	617.6	373.7	247.8
MEAN	297	401	532	522	30[illegible]	949	1766	376	33.8	19.9	12.1	8.26
MAX	846	556	539	531	4[illegible]	7440	8130	1100	89	64	24	8.8
MIN	61	68	523	484	4.7	.78	469	.78	.35	8.0	7.2	7.2

CAL YR 1979 TOTAL 193815.18 MEAN 531 MAX 8560 MIN .62
WTR YR 1980 TOTAL 158996.02 MEAN 434 MAX 8130 MIN .35

01376500 SAW MILL RIVER AT YONKERS, NY

LOCATION.--Lat 40°56'14", long 73°53'21", Westchester County, Hydrologic Unit 02030101, on right bank in Yonkers, 1,200 ft (366 m) downstream from Old Croton aqueduct, near intersection of Nepperhan Avenue and Walsh Avenue, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--25.6 mi^2 (66.3 km^2).

PERIOD OF RECORD.--November 1943 to September 1973, April 1974 to current year.

REVISED RECORDS.--WRD NY 1971: 1965, 1966.

GAGE.--Water-stage recorder crest-stage gage. Datum of gage is 80.10 ft (24.414 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1978 to Sept. 9, 1980, nonrecording and crest-stage gage at same site and datum. Prior to August 17, 1978, water-stage recorder and concrete control 1,300 ft (396 m) upstream at datum 10.89 ft (3.319 m) higher.

REMARKS.--Records poor. Flow affected by diversion by city of Yonkers, village of Tarrytown, and several industries for water supply and industrial purposes. Diurnal fluctuations caused by water supply and industrial operations.

COOPERATION.--Figures for diversion and return in upstream water supply furnished by city of Yonkers and village of Tarrytown.

AVERAGE DISCHARGE.--35 years (1944-73, 1975-80), 32.8 ft^3/s (0.929 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft^3/s (28.9 m^3/s) Sept. 27, 1975, gage height, 7.26 ft (2.213 m); minimum, 0.05 ft^3/s (0.001 m^3/s) Dec. 27, 1946, gage height, 0.37 ft (0.113 m); minimum daily, 0.2 ft^3/s (0.006 m^3/s) Jan. 1, 1944, Sept. 5, Oct. 19, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 979 ft^3/s (27.7 m^3/s) Apr. 10, gage height, 6.05 ft (1.844 m); minimum daily, 0.30 ft^3/s (0.008 m^3/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	7.3	22	16	10	15	178	86	97	7.8	3.2	2.5
2	105	7.3	20	16	10	10	124	69	65	4.0	4.3	3.8
3	79	140	18	16	10	7.4	113	59	79	4.3	76	4.6
4	88	40	18	16	10	5.5	172	53	8.0	3.0	10	1.4
5	31	26	12	16	10	10	146	51	43	4.3	4.6	1.0
6	40	12	12	16	10	7.8	136	49	10	3.8	7.0	1.2
7	30	12	36	16	12	5.2	110	56	36	6.2	5.9	1.0
8	20	7.3	30	10	12	7.8	97	128	68	2.8	3.2	.80
9	15	7.3	26	10	12	7.8	250	69	51	3.0	4.3	.80
10	42	50	26	10	12	7.7	900	66	23	3.0	3.8	.60
11	70	50	26	10	12	200	350	63	10	2.8	5.9	.30
12	26	118	7.3	15	13	35	209	56	10	3.0	3.2	2.8
13	20	36	26	35	13	18	175	71	10	2.4	3.8	3.0
14	15	18	18	16	13	26	175	56	7.8	1.8	4.0	3.0
15	12	1.8	10	16	7.7	35	218	47	13	.80	4.0	1.4
16	12	18	5.0	16	7.0	25	139	36	5.5	1.5	4.3	1.2
17	7.3	16	7.3	16	15	28	116	33	29	1.5	3.8	1.1
18	7.3	14	4.0	16	6.0	120	107	33	16	1.4	5.9	94
19	4.0	12	4.0	18	2.6	56	99	32	18	1.8	4.9	8.2
20	3.0	7.3	4.0	25	7.7	36	94	109	15	2.6	4.3	5.8
21	2.3	7.3	4.0	10	5.8	300	93	59	8.6	.40	3.5	4.6
22	1.8	7.2	4.0	10	6.9	600	79	56	8.2	.40	2.4	1.5
23	.60	7.3	4.0	10	6.0	350	76	36	7.8	1.0	5.9	3.0
24	.60	7.0	7.3	10	5.0	192	69	33	6.2	5.5	5.9	2.2
25	1.0	8.0	25	10	12	233	69	36	11	.90	4.0	2.4
26	1.8	79	92	10	6.6	151	72	34	4.0	.90	3.2	2.8
27	5.0	180	16	9.0	4.9	116	106	14	9.0	.90	2.6	4.9
28	15	79	24	9.2	5.2	101	157	20	8.2	.90	2.6	3.2
29	15	36	17	10	23	130	235	13	7.0	65	2.8	2.4
30	12	26	16	10	---	143	116	15	4.6	21	3.8	2.6
31	7.3	---	16	10	---	170	---	81	---	3.8	2.2	---
TOTAL	695.40	1037.1	556.9	433.2	280.4	3149.2	4980	1619	688.9	162.50	205.3	168.10
MEAN	22.4	34.6	18.0	14.0	9.67	102	166	52.2	23.0	5.24	6.62	5.60
MAX	105	180	92	35	23	600	900	128	97	65	76	94
MIN	.60	1.8	4.0	9.0	2.6	5.2	69	13	4.0	.40	2.2	.30
‡	7.75	5.67	5.51	7.56	6.67	10.17	1.23	7.33	7.93	7.33	5.51	1.60

CAL YR 1979 TOTAL 19263.90 MEAN 52.8 MAX 790 MIN .60 ‡ 5.12
WTR YR 1980 TOTAL 13976.00 MEAN 38.2 MAX 900 MIN .30 ‡ 6.21

‡ Indicated net diversion, in cubic feet per second, for diversion and return in upstream supply.

RESERVOIRS IN HUDSON RIVER BASIN

01335900 DELTA RESERVOIR.--Lat 43°16'20", long 75°25'50", Oneida County, Hydrologic Unit 02020004, on superstructure of gatehouse at Delta Dam on Mohawk River, and 4 mi (6 km) upstream from Rome. DRAINAGE AREA, 145 mi^2 (376 km^2). PERIOD OF RECORD, May 1913 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Dam completed Aug. 3, 1912, and controlled storage for which records are available began May 1, 1913. Usable capacity 2,800 mil ft^3 (79.3 hm^3) at crest of spillway, elevation 550.0 ft (167.64 m). Reservoir is used for navigation in Barge Canal. Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD (1951-79): Maximum contents observed, 3,136 mil ft^3 (88.8 hm^3) June 22, 1972, elevation, 552.8 ft (168.49 m); minimum observed 2.0 mil ft^3 (0.0566 hm^3) Jan. 10, 13, 16-21, Feb. 7-15, Feb. 22 to Mar. 2, 1959, elevation, 492.0 ft (149.96 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,052 mil ft^3 (86.4 hm^3) Apr. 3, elevation, 552.1 ft (168.28 m); minimum observed, 622 mil ft^3 (17.6 hm^3) Feb. 24, elevation, 523.3 ft (159.50 ft).

01343900 HINCKLEY RESERVOIR.--Lat 43°18'45", long 75°06'25", Oneida County, Hydrologic Unit 02020004, on south side of north gatehouse at Hinckley Dam on West Canada Creek at Hinckley, and 2.2 mi (3.5 km) east of Prospect. DRAINAGE AREA, 374 mi^2 (969 km^2). PERIOD OF RECORD, March 1914 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Reservoir is formed by earth and concrete dam; storage began March 1914. Usable capacity 3,320 mil ft^3 (94.0 hm^3) between elevation 1,173.5 (357.68 m) and 1,225.0 ft (373.38 m). Elevation of inverts of four 60-inch discharge pipes at north end of spillway is 1,169.5 ft (356.46 m), and elevation of inverts of two 42-inch pipes at south end for diverting water to city of Utica is 1,164.25 ft (354.863 m). Crest of Ogee spillway is at elevation 1,225.0 ft (373.38 m). Length of spillway is 400 ft (122 m). Area of water surface at crest elevation is 4.46 mi^2 (11.6 km^2). Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 4,041 mil ft^3 (114 hm^3) Oct. 2, 1945, elevation, 1,230.2 ft (374.96 m); minimum observed (after initial filling), not determined.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,818 mil ft^3 (108 hm^3) Apr. 28, elevation, 1,228.7 ft (374.51 m); minimum observed, 704 mil ft^3 (19.9 hm^3) Mar. 5, elevation, 1,193.5 ft (363.78 m).

01350100 SHOHARIE RESERVOIR (see station for mean daily elevations, skeleton capacity table, monthly contents and change in contents).

01363400 ASHOKAN RESERVOIR.--Lat 41°57'01", long 74°12'30", Ulster County, Hydrologic Unit 02020006, at gatehouse located at Dividing Weir Dyke, and 1.6 mi (2.6 km) south of Shokan. DRAINAGE AREA, 256 mi^2 (663 km^2). PERIOD OF RECORD, September 1913 to current year. REVISED RECORDS, WRD NY 1972: 1968. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

The reservoir is formed by the masonry Olive Bridge Dam across Esopus Creek and a series of earth embankments between hills. The reservoir is divided into two basins separated by a weir containing a gatehouse. Storage began Sept. 9, 1913. Usable capacity of West basin 47,180 mil gal (178.6 hm^3) between minimum operating level elevation 495.50 ft (151.028 m) and crest of spillway to East basin, elevation 590.00 ft (179.832 m); dead storage below minimum operating level 2,237 mil gal (8.467 hm^3). Usable capacity of East basin 80,678 mil gal (305.4 hm^3) between elevation 500.00 ft (152.400 m) and crest of spillway, elevation 587.10 ft (178.948 m); no dead storage. Figures given herein represent total contents for each basin. Reservoir impounds water for diversion into Catskill Aqueduct for New York City water supply (see elsewhere in this section). Any flood spillage enters the Esopus Creek channel below Olive Bridge Dam. Records furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, in West basin, 54,001 mil gal (204.4 hm^3) Mar. 31, 1951, elevation, 594.33 ft (181.152 m), in East basin, 89,411 mil gal (338.4 hm^3) Mar. 31, 1951, elevation, 592.23 ft (180.512 m); minimum observed, in West basin, 9,098 mil gal (34.44 hm^3) Oct. 24, 1926, elevation, 530.56 ft (161.715 m), in East basin, 8,394 mil gal (31.77 hm^3) Oct. 24, 1926, elevation, 525.91 ft (160.297 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, in West basin, 51,535 mil gal (195.1 hm^3) April 10, elevation, 592.00 ft (180.442 m), in East basin, 84,369 mil gal (319.3 hm^3) April 10, elevation, 589.30 ft (179.619 m); minimum observed, in West basin, 32,724 mil gal (123.9 hm^3) Sept. 30, elevation, 571.69 ft (174.251 m), in East basin, 56,120 mil gal (212.4 hm^3) Sept. 30, elevation, 571.35 ft (174.147 m).

01366400 RONDOUT RESERVOIR.--Lat 41°47'57", long 74°25'48", Ulster County, Hydrologic Unit 02020007, at release chamber at Merriman Dam on Rondout Creek, 1.1 mi (1.8 km) upstream from Brandy Brook, and 1.3 mi (2.1 km) northwest of Lackawack. DRAINAGE AREA, 94.4 mi^2 (244 km^2). PERIOD OF RECORD, May 1951 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began May 10, 1951. Initial filling (to crest of spillway) Mar. 28, 1955. Usable capacity 50,048 mil gal (189 hm^3) between minimum operating level, elevation, 720.00 ft (219.45 m) and crest of spillway, elevation, 840.00 ft (256.03 m). Dead storage below elevation 720.00 ft (219.45 m), 2,387 mil gal (9.03 hm^3). Figures given herein represent total contents. Reservoir impounds water from Rondout Creek; water diverted from Cannonsville Reservoir in the Delaware River basin through West Delaware Tunnel; water diverted from Pepacton Reservoir through East Delaware Tunnel; and water diverted from Neversink Reservoir through Neversink-Grahamsville Tunnel. Water is diverted from Rondout Reservoir for New York City water supply through West Branch Tunnel of Delaware Aqueduct (see elsewhere in this section). Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 53,355 mil gal (201.9 hm^3) June 23, 1972, elevation, 841.34 ft (256.440 m); minimum observed (after initial filling), 8,335 mil gal (31.55 hm^3) Oct. 15, 1957, elevation, 748.75 ft (228.219 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 52,122 mil gal (197.3 hm^3) May 30, elevation, 839.54 ft (255.892 m); minimum, 27,741 mil gal (105.0 hm^3) Sept. 30, elevation, 798.06 ft (243.249 m).

RESERVOIRS IN HUDSON RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (million ft³)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million ft³)	Change in contents (equivalent in ft³/s)
	01335900 Delta Reservoir *			01343900 Hinckley Reservoir *		
Sept. 30	538.0	1,570		1,211.4	1,944	
Oct. 31	538.8	1,642	+ 26.9	1,217.8	2,530	+219
Nov. 30	543.9	2,130	+188	1,224.0	3,200	+258
Dec. 31	544.8	2,220	+ 33.6	1,219.6	2,710	-183
CAL YR 1979	-	-	+ 28.2	-	-	+ 32.0
Jan. 31	537.7	1,546	-252	1,205.4	1,469	-463
Feb. 28	534.4	1,282	-105	1,193.6	709	-303
Mar. 31	548.8	2,658	+514	1,221.6	2,926	+828
Apr. 30	550.9	2,908	+ 96.5	1,224.5	3,260	+129
May 31	549.4	2,728	- 67.2	1,216.0	2,350	-340
June 30	548.5	2,625	- 39.7	1,219.8	2,730	+147
July 31	543.7	2,110	-192	1,215.9	2,341	-145
Aug. 31	538.6	1,624	-181	1,208.6	1,718	-233
Sept. 30	533.5	1,215	-158	1,205.1	1,447	-105
WTR YR 1980	-	-	- 11.2	-	-	- 15.7

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01363398	Ashokan Reservoir ** West Basin		01363399	Ashokan Reservoir ** East Basin		01366400	Rondout Reservoir **	
Sept. 30	584.13	43,631		583.30	74,411		817.93	38,415	
Oct. 31	588.98	48,402	+238	583.11	74,104	- 15.3	826.21	43,440	+251
Nov. 30	589.06	48,482	+ 4.13	585.16	77,424	+171	826.48	43,608	+ 8.7
Dec. 31	584.75	44,206	-213	583.41	74,589	-142	833.82	48,302	+234
CAL YR 1979	-	-	+ 67.5	-	-	+138	-	-	+ 32.4
Jan. 31	580.05	39,846	-218	579.64	68,530	-302	830.85	46,374	- 96.2
Feb. 28	577.44	34,979	-260	574.17	60,181	-445	827.93	44,517	- 99.1
Mar. 31	590.27	49,704	+735	586.55	79,755	+977	837.72	50,890	+318
Apr. 30	590.79	50,254	+ 28.4	588.11	82,372	+135	836.39	50,000	- 45.9
May 31	589.73	49,149	- 55.2	586.65	79,923	-122	834.31	51,713	+ 85.5
June 30	586.11	45,544	-186	584.68	76,638	-169	835.57	49,455	-116
July 31	582.61	42,221	-166	581.73	71,877	-238	826.63	43,702	-287
Aug. 31	577.64	37,741	-224	576.94	64,367	-375	813.04	35,607	-404
Sept. 30	571.69	32,724	-259	571.35	56,120	-425	797.75	[illegible],589	-414
WTR YR 1980	-	-	- 46.1	-	-	- 77.3	-	-	- 45.8

* Elevation at 2400 hours by interpolation.
** Elevation at 0900 hours on first day of following month.

DIVERSIONS IN HUDSON RIVER BASIN

Undetermined diversion at Solsville from Chenango River in Susquehanna River basin into Oriskany Creek in Mohawk River Basin through Oriskany Creek Feeder.

Undetermined diversion from (and occasionally into) Oswego River, tributary to Lake Ontario, through Summit level of Erie (Barge) Canal.

04252000 Diversion from Black River tributary into Lake Ontario through Black River canal into Mohawk River in Hudson River basin (see station).

01327500 Diversion from Hudson River basin to summit level of Champlain (Barge) Canal (see station).

01343899 Diversion from Hinckley Reservoir (see preceding pages) for municipal supply of Utica. Diversion began prior to 1921. Records furnished by Utica Board of Water Supply.

Diversion from Schoharie Reservoir (see preceding pages) on Schoharie Creek through Shandaken Tunnel to Esopus Creek at, 01362230 Lat 42°06'52", long 74°21'51", near Phoenicia, Ulster County. No diversion prior to 1924. Records furnished by Department of Environmental Protection, City of New York.

01359498 Diversion from Watervliet Reservoir from municipal supply of city of Watervliet and town of Guilderland (see station 01359519).

01363401 Diversion from Ashokan Reservoir (see preceding pages) on Esopus Creek through the Catskill Aqueduct for municipal supply of New York City. Completed in 1917. Records furnished by Department of Environmental Protection, City of New York.

01366399 Diversion from Rondout Reservoir. Total diversion from Rondout Reservoir to Delaware Aqueduct for municipal supply of City of New York. Rondout Reservoir is a collection basin for diversion from: Cannonsville Reservoir, Pepacton Reservoir, and Neversink Reservoir in the Delaware River basin and the Rondout Creek in the Hudson River basin. Diversion began April 1944 by means of temporary emergency connection to aqueduct. Records furnished by Bureau of Water Resources Development, City of New York.

01367630 Diversion from Morris Lake, tributary to Wallkill River, by Newtown Water and Sewer Authority for municipal use in New Jersey. After use the water is released into the Paulins Kill (Delaware River basin). Records available from the Delaware River Basin Commission.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	01343899 Hinckley Reservoir	01362230 Schoharie Reservoir	01363401 Ashokan Reservoir	01366399 Rondout Reservoir
October.......	32.4	54.3	928	1,360
November......	31.7	0	928	1,370
December......	30.7	0	928	1,210
CAL YR 1979	33.1	125	801	1,350
January.......	31.8	0	928	1,180
February......	34.0	0	928	1,180
March.........	32.8	318	820	1,230
April.........	35.1	0	537	1,330
May...........	29.8	226	665	1,380
June..........	33.8	343	914	1,380
July..........	35.9	299	928	1,370
August........	34.8	258	928	1,370
September.....	35.8	157	924	1,360
WTR YR 1980	33.2	138	863	1,310

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft (6 m) downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft (305 m) upstream from State Highway 59, and 1.0 mi (1.6 km) downstream from DeForest Lake.

DRAINAGE AREA.--29.4 mi^2 (76.1 km^2).

PERIOD OF RECORD.--December 1958 to current year.

GAGE.--Water-stage recorder and stop-log control. Datum of gage is 53.50 ft (16.307 m) National Geodetic Vertical Datum of 1929 (levels by Hackensack Water Co.).

REMARKS.--Records fair. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Diversions in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft^3/s (43.9 m^3/s) Feb. 3, 1973, gage height, 9.38 ft (2.859 m), from floodmarks, from rating curve extended above 840 ft^3/s (23.8 m^3/s); minimum daily, 2.6 ft^3/s (0.074 m^3/s) June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft (0.518 m) Oct. 22, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft^3/s (30.0 m^3/s) Apr. 10, gage height, 9.78 ft (2.981 m), no flow for part of Feb. 8, as a result of construction work above station; minimum gage height, 2.18 ft (0.664 m), Feb. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	20	45	34	18	19	222	110	17	21	19	60
2	23	14	46	35	18	18	118	78	18	23	21	59
3	28	60	33	32	18	18	92	71	27	23	21	59
4	21	76	21	31	18	17	178	69	23	20	18	59
5	45	30	21	31	17	19	146	38	19	22	18	59
6	65	26	22	25	17	18	83	45	14	29	18	60
7	19	24	35	18	17	18	68	42	18	20	17	59
8	22	23	36	23	14	19	64	110	19	20	17	62
9	21	21	37	23	18	21	258	66	17	20	17	76
10	38	23	35	23	18	23	808	40	18	20	17	76
11	124	31	32	33	17	42	267	38	15	17	17	86
12	49	65	30	124	18	21	147	54	15	17	17	86
13	48	60	43	106	18	20	111	84	14	18	17	85
14	51	59	56	76	19	27	144	58	16	18	17	85
15	59	47	49	63	17	26	185	32	17	17	19	85
16	46	40	43	49	18	24	118	24	17	18	24	84
17	15	31	40	22	18	27	80	19	18	17	25	84
18	16	28	36	27	18	45	70	25	21	17	56	86
19	17	26	36	36	18	42	63	40	19	17	119	72
20	17	23	38	31	18	45	53	76	21	17	86	70
21	17	23	27	20	20	288	52	83	21	16	53	70
22	17	20	26	21	20	842	51	75	20	17	58	68
23	16	20	27	23	22	339	35	37	21	23	65	68
24	17	19	28	21	22	150	37	24	21	16	56	68
25	16	18	95	18	21	205	38	19	23	17	56	68
26	14	99	146	17	20	139	29	20	21	17	56	68
27	14	326	110	17	19	94	34	20	22	17	56	67
28	20	139	78	17	20	70	311	17	21	17	57	66
29	23	71	32	19	17	111	504	17	23	17	61	65
30	23	50	32	19	---	181	145	16	35	17	65	59
31	21	---	33	20	---	178	---	17	---	21	61	---
TOTAL	951	1512	1368	1054	533	3106	4511	1464	591	586	1224	2119
MEAN	30.7	50.4	44.1	34.0	18.4	100	150	47.2	19.7	18.9	39.5	70.6
MAX	124	326	146	124	22	842	808	110	35	29	119	86
MIN	14	14	21	17	14	17	29	16	14	16	17	59

CAL YR 1979 TOTAL 20349 MEAN 55.8 MAX 808 MIN 12
WTR YR 1980 TOTAL 19019 MEAN 52.0 MAX 842 MIN 14

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi (2.4 km) upstream from Pascack Brook, 4.6 mi (7.4 km) upstream from Oradell Dam, and 27.2 mi (43.8 km) upstream from mouth.

DRAINAGE AREA.--58.0 mi^2 (150.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft (6.861 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated by De Forest Lake and Lake Tappan (see Hackensack River Basin, reservoirs in). Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--39 years, 90.5 ft^3/s (2.562 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,160 ft^3/s (61.2 m^3/s) revised, Sept. 27, 1975, gage height, 7.15 ft (2.179 m); no flow part of Jan. 16, 1970 and May 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,670 ft^3/s (47.3 m^3/s) Mar. 22, gage height, 5.89 ft (1.795 m); minimum, 26 ft^3/s (0.74 m^3/s) Mar. 3, gage height, 1.65 ft (0.503 m).

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supersede figures published in WSP 2102 and state reports for water years 1968 through 1979.

Water year	Date	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Water year	Date	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
1968	May 29, 1968	1800	51.0	6.23	1.899	1974	Mar. 21, 1974	675	19.1	3.49	1.064
1969	May 9, 1969	302	8.55	2.71	0.826	1975	Sept. 27, 1975	2160	61.2	7.15	2.179
	June 17, 1969										
1970	Apr. 4, 1970	829	23.5	3.86	1.177	1976	Jan. 28, 1976	1070	30.3	4.43	1.350
1971	Sept. 12, 14, 1971	976	27.6	4.21	1.283	1977	Mar. 23, 1977	1400	39.6	5.22	1.591
1972	June 19, 1972	1780	50.4	6.18	1.884	1978	Jan. 26, 1978	1370	38.8	5.17	1.576
1973	Feb. 5, 1973	931	26.4	4.10	1.250	1979	May 25, 1979	1450	41.1	5.34	1.628

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	41	41	50	32	32	484	241	37	126	76	124
2	61	39	41	54	31	32	280	146	44	126	84	99
3	61	61	40	47	31	32	180	113	54	125	78	80
4	39	41	40	45	31	33	287	98	58	123	61	68
5	48	37	39	48	31	32	324	75	40	123	60	64
6	112	36	39	43	31	32	183	66	38	142	60	66
7	39	36	50	36	31	32	120	71	41	122	59	66
8	35	36	41	35	31	33	105	202	44	121	59	65
9	36	36	40	34	31	42	311	145	41	120	58	64
10	55	40	40	35	31	38	1510	81	53	119	58	68
11	44	40	40	44	31	268	1060	65	41	119	58	72
12	38	62	39	258	31	62	451	82	37	118	59	77
13	37	42	64	157	31	45	224	144	36	116	69	81
14	36	46	108	119	31	108	209	126	36	115	95	83
15	36	39	75	102	31	78	295	73	36	114	94	84
16	37	37	65	80	38	58	230	53	35	112	99	84
17	37	36	78	52	42	71	141	51	35	111	106	84
18	37	36	56	43	34	200	115	48	35	111	115	100
19	37	36	52	93	32	95	102	45	35	107	171	97
20	37	36	54	65	32	79	89	96	35	101	166	91
21	37	36	47	46	35	400	84	131	35	100	164	84
22	37	36	39	39	47	1460	79	135	34	99	160	78
23	37	36	45	44	55	1220	66	85	71	106	156	75
24	37	36	53	42	55	546	58	48	128	99	152	73
25	39	36	192	35	52	388	62	44	128	98	148	73
26	39	89	222	35	48	292	61	39	127	96	144	74
27	39	61	135	33	38	184	62	37	126	95	138	73
28	45	42	38	34	34	126	380	36	124	95	134	71
29	44	40	35	33	33	171	1000	35	127	92	137	71
30	42	40	38	34	---	314	603	35	149	79	160	71
31	42	---	44	32	---	335	---	36	---	77	154	---
TOTAL	1378	1265	1930	1847	1041	6838	9155	2682	1860	3407	3332	2360
MEAN	44.5	42.2	62.3	59.6	35.9	221	305	86.5	62.0	110	107	78.7
MAX	112	89	222	258	55	1460	1510	241	149	142	171	124
MIN	35	36	35	32	31	32	58	35	34	77	58	64

CAL YR 1979 TOTAL 35035 MEAN 96.0 MAX 961 MIN 35
WTR YR 1980 TOTAL 37095 MEAN 101 MAX 1510 MIN 31

RESERVOIRS IN HACKENSACK RIVER BASIN, NJ

01376700 DE FOREST LAKE.--Lat 41°06', long 73°57', Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.85 mi (1.37 km) north of West Nyack, NY. DRAINAGE AREA, 26.6 mi^2 (68.9 km^2). PERIOD OF RECORD, February 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Total capacity at crest of dam 4,068,000,000 gal (15.40 hm^3), elevation, 80.00 ft (24.384 m). Crest of dam topped by two 50-foot (15.24 m) Bascule gates 5 ft (1.5 m) high. Flow regulated by 12-inch (0.3 m) Howell-Bunger valve at elevation, 59.25 ft (18.059 m) and 24-inch Howell-Bunger valve at elevation, 61.25 ft (18.669 m). Reservoir used for storage and water released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.50 mi (0.80 km) north of Old Tappan. DRAINAGE AREA, about 49 mi^2 (127 km^2). PERIOD OF RECORD, October 1966 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed in 1966. Capacity at spillway level, 3,378,000,000 gal (12.79 hm^3), elevation, 55.00 ft (16.764 m). Flow regulated by four Bascule gates and one sluice gate. Water is released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.75 mi (1.21 km) north of Hillsdale. DRAINAGE AREA, 19.4 mi^2 (50.2 km^2). PERIOD OF RECORD, December 1929 to current year. Monthend contents only prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed about 1905. Capacity at spillway level, 835,000,000 gal (3.160 hm^3), elevation, 94.33 ft (28.752 m). Flow is regulated by flashboards and one 36-inch (0.9 m) gate in center of dam. Water is released for diversion at New Milford by Hackensack Water Co., for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi^2 (293 km^2). PERIOD OF RECORD, December 1922 to current year. Monthend contents only prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 2,850,000,000 gal (10.79 hm^3), elevation, 22.66 ft (6.907 m). Flow regulated by seven sluice gates (7 by 9 ft or 2.1 by 2.7 m). Water is released for diversion by Hackensack Water Co., 1 mi (2 km) downstream from dam for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01376700	DE FOREST LAKE †		01376950	LAKE TAPPAN †		01377450	WOODCLIFF LAKE †	
Sept. 30	83.29	5,095	-	48.09	1,495	-	84.88	375	-
Oct. 31	85.03	5,664	+28.4	51.33	2,358	+43.1	86.78	455	+4.0
Nov. 30	85.10	5,687	+1.2	54.72	3,389	+53.2	88.84	550	+4.9
Dec. 31	85.09	5,684	-0.1	55.01	3,484	+4.7	87.82	502	-2.4
CAL YR 1979	-	-	+7.5	-	-	+9.1	-	-	+.9
Jan. 31	84.84	5,601	-4.1	55.00	3,480	-.2	85.74	411	-4.5
Feb. 29	84.45	5,472	-6.9	55.00	3,480	0	81.29	245	-8.9
Mar. 31	85.24	5,734	+13.1	55.08	3,507	+1.3	90.04	608	+18.1
Apr. 30	85.15	5,704	-1.5	55.03	3,490	-.9	92.30	725	+6.0
May 31	84.82	5,594	-5.5	54.86	3,435	-2.7	91.61	688	-1.8
June 30	84.00	5,325	-13.9	53.49	3,000	-22.4	89.06	560	-6.6
July 31	82.46	4,832	-24.6	47.61	1,379	-80.9	84.27	351	-10.4
Aug. 31	78.46	3,628	-60.1	39.20	70	-65.3	67.00	6	-17.2
Sept. 30	72.37	1,995	-84.2	34.00	0	-3.6	67.00	0	-.3
WTR YR 1980	-	-	-13.1	-	-	-6.3	-	-	-1.6
	01378480	ORADELL RESERVOIR †							
Sept. 30	19.93	2,514	-						
Oct. 31	20.25	2,584	+3.5						
Nov. 30	20.60	2,661	+4.0						
Dec. 31	21.92	2,964	+15.1						
CAL YR 1979	-	-	+4.0						
Jan. 31	21.86	2,949	-.7						
Feb. 29	19.11	2,340	-32.5						
Mar. 31	22.93	3,208	+43.3						
Apr. 30	23.13	3,259	+2.6						
May 31	21.84	3,945	+15.7						
June 30	19.43	2,408	-27.7						
July 31	19.26	2,372	-1.8						
Aug. 31	16.86	1,888	-24.2						
Sept. 30	14.66	1,478	-21.1						
WTR YR 1980	-	-	-4.4						

† Elevation at 0800 on first day of following month.

DIVERSIONS FROM HACKENSACK RIVER BASIN, NJ

01376699 Spring Valley Water Co., diverts water at De Forest Lake for municipal supply in Rockland County, NY. Records furnished by Spring Valley Water Co.

01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft (30 m) downstream from gaging station on Hackensack River at West Nyack, NY (sta 01376800) for municipal supply. Records furnished by Board of Water Commissioners of Nyack, NY.

01378490 Hackensack Water Co., diverts water for municipal supply from Oradell Reservoir at Haworth pumping station 2.0 mi (3.2 km) upstream from gaging station on Hackensack River at New Milford and from Hackensack River about 50 ft (15 m) above gaging station on Hackensack River at New Milford, NJ (sta 01378500).

01378520 Hackensack Water Co., diverts water from Hirshfeld Brook, a tributary of the Hackensack River, below the gaging station on Hackensack River at New Milford, NJ, for municipal supply. Records furnished by Hackensack Water Co.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	01376699 SPRING VALLEY WATER CO.	01376810 WEST NYACK, NY	01378490 HACKENSACK WATER CO.
October	5.36	2.18	138
November	7.04	2.13	141
December	5.88	2.11	137
CAL YR 1979	10.4	2.31	149
January	8.30	2.12	135
February	5.40	2.12	135
March	7.83	2.09	138
April	8.69	2.18	139
May	11.3	2.22	153
June	13.2	2.43	179
July	14.0	2.68	189
August	19.0	2.67	193
September	11.7	2.35	136
WTR YR 1980	9.83	2.27	151

Tabulation of diversion by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	SPARKILL CREEK (HUDSON RIVER BASIN)	01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October	0	0	3.30	0.27
November	0	0	0	0
December	0	0	.26	0
CAL YR 1979	0	.28	5.86	.47
January	0	.38	18.0	0
February	0	.78	18.9	0
March	0	1.72	13.7	.29
April	0	0	0	0
May	0	0	1.10	0
June	0	0	20.8	0
July	0	0	14.6	0
August	0	0.52	5.69	.64
September	.01	0.95	4.38	1.57
WTR YR 1980	0	0.36	8.36	.24

01387400 RAMAPO RIVER AT RAMAPO, NEW YORK

LOCATION.--Lat 41°08'25", long 74°10'14", Rockland County, Hydrologic Unit 02030103, on right bank, 105 ft (32.0 m) downstream from highway bridge on New York State Thruway at Ramapo, 500 ft (152 m) upstream from local bridge, and 0.4 mi (0.64 km) upstream from Torne Brook.

DRAINAGE AREA.--86.7 mi^2 (225 km^2).

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 297.00 ft (90.526 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor prior to July, 1980 and good thereafter. Occasional regulation by Lake Sebago.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,080 ft^3/s (144 m^3/s) Mar. 22, 1980, gage height, 9.89 ft (3.014 m); minimum, 9.2 ft^3/s (0.26 m^3/s) Sept. 11, 12, 1980, gage height, 1.35 ft (0.411 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,050 ft^3/s (29.7 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Nov. 27	0700	1,470	41.6	5.48	1.670	Apr. 10	0645	4,400	125	9.22	2.810
Mar. 22	0400	*5,080	144	*9.89	3.014	Apr. 29	0730	1,180	33.4	5.02	1.530

Minimum discharge, 9.2 ft^3/s (0.26 m^3/s) Sept. 11, 12, 1980, gage height, 1.35 ft (0.411 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	32	16	31
2									---	29	16	28
3									---	27	16	38
4									---	27	56	32
5									---	27	51	28
6									---	25	33	784
7									---	22	26	1260
8									---	22	23	414
9									---	22	21	188
10									---	20	19	124
11									---	19	18	98
12									---	18	43	84
13									---	18	115	74
14									---	18	85	74
15									---	20	59	97
16									---	20	43	76
17									---	60	34	64
18									---	43	30	55
19									---	41	35	49
20									---	33	35	41
21									---	28	31	43
22									---	24	28	210
23									---	22	27	199
24									---	22	25	116
25									---	21	25	93
26									---	20	29	83
27									---	19	27	78
28									25	18	25	69
29									25	17	24	68
30									30	17	39	74
31									---	16	38	---
TOTAL									---	767	1092	4672
MEAN									---	24.7	35.2	156
MAX									---	60	115	1260
MIN									---	16	16	28

01387400 RAMAPO RIVER AT RAMAPO, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	80	244	127	54	34	603	477	41	57	16	10
2	165	78	203	116	52	33	589	348	46	38	15	9.9
3	176	332	170	105	50	33	483	273	71	45	20	9.9
4	283	553	151	98	48	33	547	228	67	40	20	9.9
5	214	332	143	94	47	33	620	192	47	34	18	9.9
6	548	231	131	87	45	35	466	167	38	97	16	9.9
7	412	194	160	81	44	37	360	149	37	67	16	9.9
8	277	166	147	81	43	43	294	171	47	45	15	9.9
9	211	147	119	76	43	66	1220	157	51	38	15	9.5
10	223	149	109	71	42	68	3710	131	50	33	14	9.5
11	277	166	121	103	41	102	1710	119	43	29	14	9.2
12	261	216	129	440	41	88	892	128	36	26	14	15
13	236	201	153	252	40	66	632	135	32	23	14	40
14	198	175	211	164	40	76	531	129	29	22	14	22
15	168	151	166	151	41	78	605	147	27	21	14	16
16	151	137	143	131	47	63	490	138	24	19	13	15
17	141	125	164	118	40	68	366	124	22	18	13	17
18	135	118	162	110	39	477	298	90	20	18	12	34
19	125	112	166	118	38	497	260	99	18	17	11	24
20	116	107	164	112	40	261	228	107	18	17	11	21
21	109	103	162	100	45	1070	202	103	17	16	11	20
22	103	100	160	92	50	4400	176	112	17	15	11	20
23	98	98	145	88	57	2260	157	99	15	35	11	19
24	96	94	131	85	68	1200	146	89	15	28	11	20
25	94	96	252	80	65	990	137	81	19	21	11	22
26	87	565	316	76	62	764	132	71	21	19	11	23
27	78	1300	218	71	50	584	129	60	16	18	11	23
28	83	687	177	70	45	464	372	55	15	16	11	22
29	102	433	157	65	41	429	1080	49	14	16	10	22
30	96	307	141	57	---	522	731	39	91	18	10	22
31	85	---	137	56	---	505	---	37	---	17	10	---
TOTAL	5435	7553	5152	3475	1358	15379	18166	4304	1004	923	413	524.5
MEAN	175	252	166	112	46.8	496	606	139	33.5	29.8	13.3	17.5
MAX	548	1300	316	440	68	4400	3710	477	91	97	20	40
MIN	78	78	109	56	38	33	129	37	14	15	10	9.2

WTR YR 1980 TOTAL 63686.5 MEAN 174 MAX 4400 MIN 9.2

01387420 RAMAPO RIVER AT SUFFERN, NEW YORK

LOCATION.--Lat 41°07'06", long 74°09'38", Rockland County, Hydrologic Unit 02030103, on left bank, 145 ft (44.2 m) downstream from highway bridge on New York State Thruway at Suffern, and 1.1 mi (1.77 km) upstream from Mahwah River.

DRAINAGE AREA.--93.0 mi^2 (241 km^2).

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 264.44 ft (80.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow affected by diversion from Spring Valley Water Company well field upstream from station and by occasional regulation by Lake Sebago.

COOPERATION.--Figures of pumpage from well field furnished by Spring Valley Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 5,160 ft^3/s (146 m^3/s) Mar. 22, 1980 (gage height about 11.1 ft or 3.38 m) from rating curve extended above 1,800 ft^3/s (51 m^3/s) on basis of runoff comparison with station 1.5 mi (2.4 km) upstream; minimum 6.9 ft^3/s (0.20 m^3/s) Sept. 8, 1980, gage height, 1.29 ft (0.393 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft^3/s (31.2 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0630	1,470	41.6	5.97	1.820	Apr. 10	^{a}0700	4,600	130	^{a}10.5	3.20
Mar. 22	^{a}0500	*^{a}5,160	146	*^{a}11.1	3.38	Apr. 29	^{a}0800	1,310	37.1	^{a}5.6	1.71

a About.

Minimum discharge, 6.9 ft^3/s (0.20 m^3/s) Sept. 8, gage height 1.29 ft (0.393 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	41	13	29
2									---	35	12	26
3									---	30	13	49
4									---	28	64	34
5									---	28	63	27
6									---	23	39	997
7									---	22	27	1280
8									---	18	22	460
9									---	17	18	226
10									---	16	16	164
11									---	15	16	135
12									---	14	54	115
13									---	13	140	100
14									---	14	105	100
15									---	16	74	133
16									---	16	52	102
17									---	70	38	85
18									---	48	32	58
19									---	44	41	50
20									---	34	39	44
21									---	26	32	46
22									---	23	28	220
23									---	21	26	210
24									---	19	25	120
25									---	19	24	96
26									---	18	28	86
27									---	16	25	80
28									25	15	23	74
29									25	14	21	72
30									34	14	40	80
31									---	13	39	---
TOTAL									---	740	1189	5298
MEAN									---	23.9	38.4	177
MAX									---	70	140	1280
MIN									---	13	12	26

01387420 RAMAPO RIVER AT SUFFERN, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	90	251	146	61	37	638	554	45	65	12	9.4
2	140	88	218	135	57	35	616	404	51	40	13	9.4
3	200	358	190	119	52	33	533	325	78	49	24	8.5
4	300	594	173	109	52	32	598	281	72	43	21	8.1
5	260	338	159	106	50	32	672	232	50	31	15	8.5
6	560	251	152	97	48	37	508	210	37	102	13	8.5
7	450	218	178	93	47	38	404	190	37	75	11	8.5
8	330	200	166	92	46	48	328	180	51	48	11	8.5
9	230	175	142	85	45	74	1160	192	53	37	13	8.1
10	260	171	131	83	45	72	3870	178	51	31	14	8.1
11	290	183	139	125	44	113	1820	164	44	25	14	7.7
12	270	237	146	464	43	106	990	164	36	22	13	8.1
13	240	237	164	266	42	77	693	164	31	18	13	44
14	220	213	213	200	41	88	559	152	27	17	13	22
15	190	190	185	190	40	92	625	152	24	16	13	13
16	170	178	166	166	48	74	537	144	21	14	13	9.9
17	150	161	178	150	44	75	386	131	20	13	13	11
18	140	150	175	142	42	464	322	95	17	13	11	33
19	135	137	180	152	42	598	281	106	15	11	11	20
20	125	131	178	144	45	296	251	115	14	13	11	17
21	120	125	178	129	48	1010	237	113	14	14	11	15
22	110	117	175	119	57	4540	221	121	12	14	11	13
23	110	111	166	117	62	2520	203	106	11	37	11	9.4
24	105	102	150	109	71	1330	185	95	11	31	10	14
25	100	104	254	104	68	1070	175	87	13	23	9.9	15
26	96	682	309	100	65	824	157	75	19	17	9.9	17
27	90	1320	226	93	54	611	146	66	9.9	14	9.9	16
28	96	745	195	92	43	472	397	59	8.5	11	9.9	17
29	110	441	178	87	40	426	1220	54	10	15	9.4	18
30	98	306	168	80	---	546	854	42	90	18	9.4	18
31	88	---	157	75	---	537	---	39	---	15	9.9	---
TOTAL	5883	8353	5640	4169	1442	16307	19586	4990	972.4	892	383.3	423.7
MEAN	190	278	182	134	49.7	526	653	161	32.4	28.8	12.4	14.1
MAX	560	1320	309	464	71	4540	3870	554	90	102	24	44
MIN	88	88	131	75	40	32	146	39	8.5	11	9.4	7.7
*	4.6	1.5	3.0	1.8	4.6	4.5	3.0	3.8	7.1	5.7	0.7	5.2

WTR YR 1980 TOTAL 69041.4 MEAN 189 MAX 4540 MIN 7.7

* Diversion, in cubic feet per second, by pumpage from well field upstream of station.

01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, Hydrologic Unit 02030103, on left bank 13 ft (4 m) upstream from bridge on U.S. Highway 202, 2.5 mi (4.0 km) northeast of Suffern, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--August 1958 to current year.

REVISED RECORDS.--WRD NY-79-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft (98.015 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft (4 m) downstream, at present datum.

REMARKS.--Records fair except those below 10 ft³/s (0.28 m³/s), which are poor. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--22 years, 25.0 ft³/s (0.708 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft³/s (52.1 m³/s) Nov. 8, 1977, gage height, 9.91 ft (3.021 m), from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of contracted-opening measurements at gage heights 8.52 ft (2.597 m) and 9.91 ft (3.021 m); minimum 0.05 ft³/s (0.001 m³/s) Oct. 20, 21, 1970, result of temporary pumping from gage pool.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.67 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 6	0045	402	11.4	4.63	1.411	Apr. 10	0045	*966	27.4	*6.39	1.948
Nov. 26	1800	253	7.2	4.00	1.219	Apr. 28	2145	561	15.9	5.16	1.573
Mar. 21	1945	927	26.3	6.26	1.908						

Minimum daily discharge, 0.40 ft³/s (0.01 m³/s) Sept. 16; minimum gage height 1.24 ft (0.378 m), Sept. 23, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	11	34	19	8.5	6.0	90	76	11	5.9	2.9	.51
2	27	11	29	18	8.0	6.0	74	59	10	5.1	2.0	.46
3	45	57	25	17	7.6	5.7	62	49	20	6.2	5.0	.46
4	44	50	23	15	7.6	5.7	89	41	14	4.9	2.5	.47
5	58	37	21	15	7.4	6.1	75	36	10	4.3	2.0	.62
6	158	29	20	13	7.2	6.6	59	32	7.9	13	4.1	.78
7	75	25	29	12	7.1	7.1	50	29	8.3	6.2	2.0	.71
8	50	22	22	13	7.1	7.7	44	47	9.0	4.3	1.5	.70
9	38	19	18	12	7.1	9.7	301	34	8.3	3.7	1.2	.70
10	42	21	17	11	7.2	9.2	587	26	9.1	3.2	.92	.73
11	44	22	16	36	7.1	19	205	24	7.6	3.1	.85	.76
12	38	40	15	74	7.0	12	117	28	6.7	2.8	.87	.75
13	36	30	25	39	6.7	9.8	86	30	6.1	2.2	.82	.75
14	29	27	27	29	6.6	11	88	23	5.6	2.0	.72	.63
15	25	24	19	28	6.6	11	94	18	5.3	2.0	.77	.47
16	22	22	17	24	7.6	9.7	70	16	5.1	2.0	.80	.40
17	20	20	20	21	7.1	12	57	15	4.7	2.2	.81	.80
18	18	19	15	20	6.6	111	49	16	4.2	2.5	.73	1.1
19	17	17	14	23	6.6	66	43	19	4.1	1.9	.78	.71
20	16	17	14	20	6.7	47	39	23	4.0	1.7	.80	.63
21	15	16	14	18	7.5	325	35	23	3.9	1.6	.76	.67
22	14	16	14	16	8.5	602	31	21	3.6	1.5	.71	.63
23	13	15	16	16	8.8	227	28	15	3.5	5.2	.70	.59
24	14	14	18	14	11	124	25	13	3.3	3.3	.66	.59
25	13	14	59	13	11	119	23	12	3.2	2.2	.64	.55
26	12	116	47	12	10	85	22	10	3.0	1.7	.55	.71
27	11	124	35	12	8.3	68	21	9.8	2.9	1.6	.51	1.0
28	14	73	28	11	7.5	58	166	9.1	2.9	1.4	.51	.80
29	15	53	24	11	6.6	65	227	8.6	3.2	1.9	.47	.87
30	13	41	22	9.8	---	72	113	8.3	14	2.6	.50	.94
31	12	---	20	9.2	---	77	---	8.6	---	3.7	.51	---
TOTAL	971	1002	717	601.0	222.6	2200.3	2970	779.4	204.5	105.9	38.59	20.49
MEAN	31.3	33.4	23.1	19.4	7.68	71.0	99.0	25.1	6.82	3.42	1.24	.68
MAX	158	124	59	74	11	602	587	76	20	13	5.0	1.1
MIN	11	11	14	9.2	6.6	5.7	21	8.3	2.9	1.4	.47	.40

CAL YR 1979 TOTAL 12885.30 MEAN 35.3 MAX 498 MIN 1.7
WTR YR 1980 TOTAL 9832.78 MEAN 26.9 MAX 602 MIN .40

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft (107 m) downstream from State Highway 17, 0.6 mi (1.0 km) downstream from Mahwah River, and 1.0 mi (1.6 km) west of Mahwah.

DRAINAGE AREA.--118 mi^2 (306 km^2).

PERIOD OF RECORD.--October 1902 to December 1906, September 1922 to current year (October 1902 to February 1905 monthly discharge only, published in WSP 1302). Figures of daily discharge Feb. 10, 1903, to Dec. 31, 1904, published in WSP 97, 125, are unreliable and should not be used.

REVISED RECORDS.--WSP 781: 1904(M). WSP 1031: 1938, 1940. WSP 1552: 1923(M), 1924, 1925-26(M), 1927-28, 1933, 1937. WRD-NJ 1971: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft (77.145 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft (76 m) downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Water-discharge records fair. Occasional regulation from lakes and ponds upstream from the station.

AVERAGE DISCHARGE.--62 years (water years 1903-06,1923-80), 231 ft^3/s (6.542 m^3/s), 26.54 in/yr (674 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft^3/s (352 m^3/s) Oct. 9, 1903, (gage height, 11.0 ft or 3.35 m, from graph based on gage readings, site and datum then in use) from rating curve extended above 1,400 ft^3/s (39.6 m^3/s); maximum gage height, 12.44 ft (3.792 m) Nov. 8, 1977; minimum discharge, 7 ft^3/s (0.20 m^3/s) Dec. 16, 1930, Sept. 12, 1932; minimum daily discharge, 8 ft^3/s (0.23 m^3/s) Aug. 25, 1929, Sept. 5, 12, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft^3/s (39.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0845	1720	48.7	7.55	2.301	Apr. 10	0545	5880	167	10.43	3.179
Mar. 22	0700	*6520	185	10.70	3.261	Apr. 29	0400	1940	54.9	7.86	2.396

Minimum discharge, 12 ft^3/s (0.33 m^3/s) Sept. 3, 4, 10-12; minimum gage height, 2.91 ft (0.887 m) Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	107	373	203	80	52	877	729	82	75	22	14
2	311	105	320	187	81	51	803	553	91	58	25	14
3	351	477	276	167	77	45	670	445	135	63	37	14
4	471	701	244	153	75	47	814	375	112	53	31	13
5	432	458	226	142	72	50	843	320	82	59	33	14
6	809	343	214	131	69	53	649	286	69	145	29	14
7	578	294	269	124	68	56	518	260	74	78	22	13
8	411	257	242	122	66	63	447	336	84	54	21	14
9	324	228	199	118	66	89	1660	282	85	46	20	14
10	358	240	179	110	65	88	4860	231	84	40	20	13
11	415	273	190	206	64	162	2210	208	74	35	20	13
12	382	370	201	679	65	129	1280	233	66	31	21	13
13	352	320	252	416	62	95	921	251	60	29	21	37
14	299	280	325	298	60	110	817	213	53	27	20	22
15	257	244	269	273	58	113	910	220	47	26	21	17
16	228	219	229	241	65	92	728	202	46	24	20	14
17	206	199	259	211	71	119	575	187	43	25	19	15
18	188	184	246	197	63	702	480	149	41	26	19	38
19	174	172	251	223	61	691	425	164	38	24	19	23
20	161	163	247	201	63	406	377	184	37	24	18	19
21	151	155	239	178	66	1760	341	182	36	23	17	19
22	139	148	240	163	76	5630	304	186	34	26	16	18
23	131	142	231	158	83	2740	276	153	31	64	16	15
24	130	138	211	151	92	1550	253	136	30	42	15	18
25	127	138	402	140	95	1350	235	122	33	31	15	20
26	116	703	472	134	88	1050	223	108	36	26	15	22
27	106	1580	345	126	77	799	222	96	29	22	15	20
28	119	923	288	121	70	649	830	90	26	20	15	22
29	142	601	256	116	56	655	1690	85	33	34	14	23
30	129	452	237	104	---	761	1090	77	143	29	14	24
31	115	---	220	95	---	763	---	76	---	25	14	---
TOTAL	8299	10614	8152	5888	2054	20920	26328	7139	1834	1284	624	549
MEAN	268	354	263	190	70.8	675	878	230	61.1	41.4	20.1	18.3
MAX	809	1580	472	679	95	5630	4860	729	143	145	37	38
MIN	106	105	179	95	56	45	222	76	26	20	14	13

CAL YR 1979 TOTAL 122555 MEAN 336 MAX 4240 MIN 19
WTR YR 1980 TOTAL 93685 MEAN 256 MAX 5630 MIN 13

(NOTE: WATER-QUALITY DATA FOR THIS STATION ARE NOT PUBLISHED IN THIS REPORT: THEY ARE PUBLISHED IN THE SERIES "WATER RESOURCES DATA FOR NEW JERSEY.")

01413500 EAST BRANCH DELAWARE RIVER AT MARGARETVILLE, NY

LOCATION.--Lat 42°08'41", long 74°39'14", Delaware County, Hydrologic Unit 02040102, on right bank at downstream side of bridge on Fair Street at intersection with Main Street at Margaretville, 0.2 mi (0.3 km) upstream from unnamed tributary, and 1.6 mi (2.6 km) downstream from Dry Brook.

DRAINAGE AREA.--163 mi^2 (422 km^2).

PERIOD OF RECORD.--February 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,302.38 ft (396.965 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1937, nonrecording gage and Sept. 9, 1937 to Aug. 17, 1944, water-scage recorder, at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for January and February, which are fair, and for flows below 25 ft^3/s (0.71 m^3/s) which are fair.

AVERAGE DISCHARGE.--43 years, 308 ft^3/s (8.723 m^3/s), 25.66 in/yr (652 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft^3/s (445 m^3/s) Nov. 25, 1950, gage height, 13.84 ft (4.218 m), from rating curve extended above 8,700 ft^3/s (246 m^3/s); minimum, 5.0 ft^3/s (0.14 m^3/s) Aug. 5, 1964; minimum gage height, 0.89 ft (0.271 m) Sept. 30, Oct. 1, 1943, present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft^3/s (79 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2130	4,910	139	8.96	2.731	Mar. 21	2145	*9,140	259	*12.02	3.664
Mar. 18	0800	3,440	97.4	7.65	2.332						

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 23, 24, 25; minimum gage height, 2.60 ft (0.792 m), Mar. 2, 3, 4, 5, Aug. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	446	134	599	185	84	47	794	764	80	299	37	32
2	580	202	507	183	74	40	706	644	74	196	55	28
3	436	978	428	164	68	39	611	542	74	160	117	29
4	446	739	387	140	66	36	832	461	78	132	74	28
5	610	626	349	147	62	38	880	403	68	126	53	28
6	1320	543	320	130	60	58	692	368	60	220	45	33
7	801	482	301	129	60	71	611	383	99	135	41	26
8	650	424	265	130	58	598	579	312	87	123	41	22
9	700	375	229	130	55	575	1360	278	78	138	34	19
10	595	407	217	120	54	216	1890	250	87	109	31	18
11	499	361	204	138	52	224	1270	231	72	97	32	18
12	471	316	191	301	50	131	1020	220	62	92	34	17
13	451	293	185	160	50	99	920	239	57	78	32	16
14	383	290	176	162	50	96	772	291	52	72	31	15
15	344	265	159	156	51	119	1020	224	50	66	53	16
16	314	255	157	139	51	134	802	196	70	62	45	17
17	282	237	191	132	52	317	658	179	57	59	37	16
18	257	232	140	132	52	2270	573	179	50	55	34	21
19	234	213	139	131	52	817	501	196	47	52	32	20
20	216	197	140	123	52	644	439	176	47	49	32	18
21	200	186	130	110	50	3400	393	167	52	47	31	17
22	186	178	134	116	49	5260	344	163	47	50	29	16
23	175	171	139	117	50	2060	312	141	42	64	28	14
24	232	172	175	91	49	1500	282	129	40	53	26	14
25	198	266	278	110	48	1360	262	117	38	45	25	15
26	175	1550	258	106	46	954	242	107	36	42	24	24
27	163	2370	227	99	47	779	231	99	34	40	23	24
28	162	1340	218	92	51	721	349	92	34	37	22	20
29	160	964	221	91	53	912	1230	87	170	37	22	18
30	148	746	218	82	---	1020	920	80	721	40	32	17
31	139	---	202	84	---	920	---	78	---	38	38	---
TOTAL	11973	15512	7484	4130	1596	25455	21495	7796	2563	2813	1190	616
MEAN	386	517	241	133	55.0	821	717	251	85.4	90.7	38.4	20.5
MAX	1320	2370	599	301	84	5260	1890	764	721	299	117	33
MIN	139	134	130	82	46	36	231	78	34	37	22	14
CFSM	2.37	3.17	1.48	.82	.34	5.04	4.40	1.54	.52	.56	.24	.13
IN.	2.73	3.54	1.71	.94	.36	5.81	4.91	1.78	.58	.64	.27	.14

CAL YR 1979 TOTAL 148717 MEAN 407 MAX 4690 MIN 30 CFSM 2.50 IN 33.94
WTR YR 1980 TOTAL 102623 MEAN 280 MAX 5260 MIN 14 CFSM 1.72 IN 23.42

01414500 MILL BROOK NEAR DUNRAVEN, NY

LOCATION.--Lat 42°06'22", long 74°43'51", Delaware County, Hydrologic Unit 02040102, on left bank 0.4 mi (0.6 km) upstream from bridge on New York City Road 9 and Pepacton Reservoir, and 2.7 mi (4.3 km) southwest of Dunraven.

DRAINAGE AREA.--25.0 mi^2 (64.7 km^2).

PERIOD OF RECORD.--February 1937 to current year. Published as "at Arena" 1937-67.

REVISED RECORDS.--WSP 1432: 1937.

GAGE.--Water-stage recorder. Datum of gage is 1,298.54 ft (395.795 m) Board of Water Supply, City of New York datum. Prior to Oct. 17, 1939, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. Oct. 17 to Dec. 8, 1939, nonrecording gage at present site at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--43 years, 56.3 ft^3/s (1.594 m^3/s), 30.58 in/yr (777 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft^3/s (127 m^3/s) Sept. 21, 1938, from rating curve extended above 960 ft^3/s (27.2 m^3/s) on basis of velocity-area study; maximum gage height, 9.92 ft (3.024 m) Nov. 25, 1950; minimum discharge observed, 1.2 ft^3/s (0.034 m^3/s) Sept. 25, 26, 1939, gage height, 0.71 ft (0.216 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 740 ft^3/s (21 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	1930	*4,770	135	7.61	2.320	Apr. 9	1330	796	22.5	5.54	1.689
Mar. 21	Unknown	ice jam		*9.0	2.74						

Minimum discharge, 3.0 ft^3/s (0.08 m^3/s) Sept. 16, 17, 23, 24, 25, 26, 29, 30, gage height, 2.83 ft (0.863 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	28	100	36	20	8.8	132	121	12	108	7.4	4.2
2	123	56	83	34	19	8.6	118	104	12	70	9.2	3.9
3	104	202	68	31	18	8.4	102	90	14	53	16	3.8
4	98	143	59	29	17	8.0	141	76	17	44	12	3.6
5	132	113	52	30	16	8.4	154	66	12	49	8.3	3.7
6	193	94	48	29	16	15	125	60	9.7	68	7.2	4.5
7	127	78	45	29	15	18	113	58	24	45	6.7	3.8
8	100	67	40	29	15	140	115	50	17	39	6.5	3.6
9	100	57	35	30	15	100	361	45	15	36	6.2	3.4
10	92	64	33	30	14	50	487	41	16	31	5.9	3.4
11	79	58	32	43	13	30	264	38	13	27	5.7	3.3
12	77	52	30	84	13	21	192	36	11	25	5.7	3.3
13	76	48	28	39	12	18	172	35	9.8	22	5.6	3.1
14	64	46	27	42	12	17	151	37	8.9	19	5.6	3.1
15	56	43	25	37	11	19	190	30	8.9	17	6.5	3.1
16	49	41	23	34	11	25	164	27	16	16	6.3	3.1
17	44	39	22	32	11	30	140	26	11	14	5.9	3.3
18	40	38	21	32	10	1200	122	26	9.0	12	5.6	4.1
19	37	36	21	32	9.8	500	102	28	8.3	11	5.4	3.4
20	35	34	21	31	10	3[illegible]	87	27	8.9	10	5.4	3.4
21	32	33	21	32	11	3800	74	25	9.8	9.3	5.0	3.4
22	30	32	21	30	11	850	63	24	8.8	11	4.9	3.2
23	27	31	22	29	11	281	55	23	7.9	10	4.8	3.1
24	36	32	27	27	10	202	50	21	7.2	9.0	4.7	3.0
25	31	42	53	25	9.8	184	46	20	7.0	8.1	4.7	3.0
26	29	950	54	24	9.6	132	42	18	6.7	7.2	4.5	3.4
27	27	592	51	24	9.4	111	41	17	6.5	7.0	4.4	3.1
28	27	245	47	23	9.2	113	68	15	6.3	6.7	4.4	3.1
29	27	165	45	22	9.0	164	152	14	80	7.2	4.4	3.1
30	28	125	42	21	---	196	137	13	226	8.1	5.5	3.0
31	29	---	38	21	---	167	---	12	---	6.8	4.3	---
TOTAL	2047	3584	1234	991	367.8	8725.2	4160	1223	619.7	806.4	194.7	102.5
MEAN	66.0	119	39.8	32.0	12.7	281	139	39.5	20.7	26.0	6.28	3.42
MAX	193	950	100	84	20	3800	487	121	226	108	16	4.5
MIN	27	28	21	21	9.0	8.0	41	12	6.3	6.7	4.3	3.0
CFSM	2.64	4.76	1.59	1.28	.51	11.2	5.56	1.58	.83	1.04	.25	.14
IN.	3.05	5.33	1.84	1.47	.55	12.98	6.19	1.82	.92	1.20	.29	.15

CAL YR 1979 TOTAL 25552.3 MEAN 70.0 MAX 950 MIN 4.5 CFSM 2.80 IN 38.02
WTR YR 1980 TOTAL 24055.3 MEAN 65.7 MAX 3800 MIN 3.0 CFSM 2.63 IN 35.79

01415000 TREMPER KILL NEAR ANDES, NY

LOCATION.--Lat 42°07'12", long 74°49'08", Delaware County, Hydrologic Unit 02040102, on right bank 500 ft (152 m) upstream from bridge on County Highway 1, about 1,700 ft (518 m) upstream from Pepacton Reservoir, and 5 mi (8 km) south of Andes.

DRAINAGE AREA.--33.0 mi^2 (85.5 km^2).

PERIOD OF RECORD.--February 1937 to current year. Published as "near Shavertown" 1937-67.

GAGE.--Water-stage recorder. Concrete control since Nov. 1937. Datum of gage is 1,285.87 ft (391.933 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1937, nonrecording gage at site 500 ft (152 m) downstream at different datum. Aug. 5 to Sept. 28, 1937, nonrecording gage at site 0.25 mi (0.40 km) downstream at different datum.

REMARKS.--Records good except for winter periods, which are poor.

AVERAGE DISCHARGE.--43 years, 60.1 ft^3/s (1.702 m^3/s), 24.73 in/yr (628 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft^3/s (120 m^3/s) Sept. 21, 1938, gage height, 7.12 ft (2.170 m), from rating curve extended above 1,500 ft^3/s (42.5 m^3/s); minimum, 0.5 ft^3/s (0.014 m^3/s) Sept. 17, 21, 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (20 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2000	1,100	31.2	5.00	1.524
Mar. 18	0715	776	22.0	4.65	1.417
Mar. 22	0130	*1,340	37.9	*5.23	1.594

Minimum discharge, 2.4 ft^3/s (0.068 m^3/s) Aug. 29, gage height, 2.32 ft (0.707 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	32	106	50	20	7.8	149	102	12	32	5.9	8.7
2	72	74	90	43	19	7.8	128	91	11	24	7.1	7.1
3	90	399	76	43	18	7.6	110	77	11	21	13	8.7
4	60	210	67	40	17	7.6	147	66	10	18	9.2	6.1
5	106	152	62	36	16	8.0	138	59	8.7	21	6.9	8.7
6	266	119	58	37	15	10	118	56	7.7	39	6.1	26
7	184	104	53	35	15	13	105	54	28	24	5.1	13
8	144	92	47	34	14	160	95	46	17	21	4.4	9.2
9	168	78	43	34	13	130	158	41	14	19	3.8	7.5
10	129	88	42	33	13	90	230	38	16	17	3.3	6.8
11	111	72	38	37	12	60	178	36	12	15	3.7	6.1
12	106	63	36	45	12	46	148	34	10	16	4.1	5.5
13	95	60	36	42	12	42	136	40	8.9	12	3.9	4.7
14	80	60	34	39	11	39	119	56	7.7	11	3.7	4.7
15	72	55	31	40	11	40	187	40	7.5	9.9	20	5.2
16	65	55	31	35	11	45	146	36	12	9.6	11	4.7
17	58	52	30	32	11	147	124	33	8.0	8.9	7.4	4.7
18	52	53	29	32	10	449	108	36	6.7	7.9	5.6	9.6
19	47	47	29	32	9.8	188	92	40	6.2	7.0	4.8	6.4
20	44	46	28	31	9.6	196	80	34	8.0	6.6	4.4	5.2
21	40	44	28	33	9.2	527	70	33	11	6.4	4.0	4.2
22	38	43	27	30	9.0	662	60	32	9.0	8.1	3.6	4.0
23	35	42	31	30	8.8	289	54	28	7.6	16	3.6	3.6
24	55	47	42	28	8.6	234	49	25	6.9	8.5	3.1	3.4
25	41	80	84	29	8.4	224	47	23	6.1	6.4	2.8	3.1
26	38	309	70	27	8.2	155	43	20	5.8	5.5	2.6	11
27	35	404	66	25	8.0	136	42	18	5.8	4.9	2.5	7.1
28	36	251	62	24	8.0	130	82	16	5.6	4.3	2.5	5.2
29	36	177	60	23	7.8	180	141	15	16	6.1	2.5	4.4
30	35	132	56	22	---	189	113	13	64	10	12	4.0
31	32	---	50	21	---	177	---	12	---	7.5	19	---
TOTAL	2452	3440	1542	1042	345.4	4596.8	3397	1250	360.2	423.6	191.6	208.6
MEAN	79.1	115	49.7	33.6	11.9	148	113	40.3	12.0	13.7	6.18	6.95
MAX	266	404	106	50	20	662	230	102	64	39	20	26
MIN	32	32	27	21	7.8	7.6	42	12	5.6	4.3	2.5	3.1
CFSM	2.40	3.49	1.51	1.02	.36	4.49	3.42	1.22	.36	.42	.19	.21
IN.	2.76	3.88	1.74	1.17	.39	5.18	3.83	1.41	.41	.48	.22	.24

CAL YR 1979 TOTAL 27786.5 MEAN 76.1 MAX 970 MIN 2.2 CFSM 2.31 IN 31.32
WTR YR 1980 TOTAL 19249.2 MEAN 52.6 MAX 662 MIN 2.5 CFSM 1.59 IN 21.70

01417000 EAST BRANCH DELAWARE RIVER AT DOWNSVILLE, NY

LOCATION.--Lat 42°04'30", long 74°58'36", Delaware County, Hydrologic Unit 02040102, on left bank 0.5 mi (0.8 km) downstream from Downsville Dam, at downstream end of outlet channel of Pepacton Reservoir, and 1.0 mi (1.6 km) east of Downsville.

DRAINAGE AREA.--371 mi^2 (961 km^2).

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,094.92 ft (333.731 m) Board of Water Supply, City of New York datum. Prior to Sept. 26, 1941, nonrecording gage, and Sept. 26, 1941, to June 27, 1955, water-stage recorder, at site 0.8 mi (1.3 km) downstream at datum 7.03 ft (2.143 m) lower.

REMARKS.--Records good. Subsequent to September 1954, entire flow from drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,900 ft^3/s (677 m^3/s) Nov. 26, 1950, gage height, 14.52 ft (4.426 m), site and datum then in use, from rating curve extended above 12,000 ft^3/s (340 m^3/s); minimum, 0.3 ft^3/s (0.008 m^3/s) Oct. 11, 1954; minimum daily, 0.6 ft^3/s (0.017 m^3/s) Oct. 10, 1954; minimum gage height, 1.39 ft (0.424 m) Jan. 17, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of about 16 ft or 5 m (at former datum).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,120 ft^3/s (60.0 m^3/s) Apr. 12, gage height, 4.73 ft (1.442 m); minimum daily, 48 ft^3/s (1.359 m^3/s) Mar. 3-5, Mar. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	58	54	54	51	51	70	988	72	70	74	120
2	76	56	54	54	54	51	68	850	74	72	74	95
3	76	53	54	54	53	48	68	647	74	70	74	72
4	76	55	53	54	54	48	68	464	74	68	74	74
5	77	57	53	54	54	48	68	337	74	72	74	72
6	77	57	56	54	54	50	68	257	74	70	74	74
7	77	57	54	54	53	48	68	231	74	70	74	74
8	77	57	54	54	53	51	68	157	74	70	95	114
9	77	57	54	54	51	50	68	97	72	70	117	185
10	77	56	54	53	51	50	150	74	72	70	97	252
11	77	56	54	54	54	54	1370	70	74	70	74	286
12	77	57	54	53	51	54	1980	72	74	70	74	286
13	77	56	54	53	53	54	2000	72	74	70	76	286
14	77	56	53	54	53	54	1790	72	74	70	76	286
15	77	53	50	54	54	54	1940	72	74	72	76	292
16	77	50	53	53	54	53	1890	72	74	95	74	292
17	77	54	56	54	54	53	1700	72	74	117	74	286
18	77	57	53	53	53	54	1490	68	74	120	74	286
19	77	57	54	53	54	54	1300	70	74	117	74	286
20	72	56	54	53	54	50	1120	70	74	117	74	286
21	74	55	54	54	53	50	920	70	74	120	74	286
22	76	56	54	54	51	51	483	70	74	92	74	286
23	77	57	54	54	51	53	263	70	74	74	74	286
24	76	57	54	53	54	54	161	70	87	74	74	274
25	76	57	54	54	54	56	102	70	114	74	74	274
26	76	67	54	50	54	53	76	70	117	74	74	286
27	76	57	53	51	50	53	78	70	100	74	74	292
28	76	56	54	54	50	51	97	70	76	74	76	286
29	69	57	54	53	50	60	503	70	72	74	74	286
30	56	57	51	51	---	72	960	70	72	74	97	292
31	55	---	51	51	---	72	---	70	---	74	120	---
TOTAL	2319	1691	1662	1652	1529	1654	20987	5582	2334	2498	2458	6852
MEAN	74.8	56.4	53.6	53.3	52.7	53.4	700	180	77.8	80.6	79.3	228
MAX	77	67	56	54	54	72	2000	988	117	120	120	292
MIN	55	50	50	50	50	48	68	68	72	68	74	72

CAL YR 1979 TOTAL 70183 MEAN 192 MAX 3300 MIN 18
WTR YR 1980 TOTAL 51218 MEAN 140 MAX 2000 MIN 48

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY

LOCATION.--Lat 42°01'28", long 75°07'10", Delaware County, Hydrologic Unit 02040102, on right bank 800 ft (244 m) downstream from Baxter Brook, and 1,100 ft (335 m) downstream from highway bridge at Harvard. Water-quality sampling site at discharge station.

DRAINAGE AREA.--457 mi² (1,184 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to June 1967, November 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,007.41 ft (307.059 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1958, water-stage recorder 1,100 ft (335 m) upstream at datum 0.65 ft (0.198 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River Basin, as directed by the Delaware River Master.

EXTREMES.--Maximum discharge, 31,400 ft³/s (889 m³/s) Sept. 22, 1938, gage height, 16.93 ft (5.160 m) site and datum then in use, from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of slope-area measurement at gage height 15.58 ft (4.749 m); minimum, 7.2 ft³/s (0.20 m³/s) Oct. 13, 1954, gage height 1.63 ft (0.497 m); minimum daily 7.6 ft³/s (0.22 m³/s) Oct. 13, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,310 ft³/s (179 m³/s) Nov. 26, gage height, 8.30 ft (2.530 m); minimum discharge, 55 ft³/s (1.56 m³/s) Dec. 18, gage height 1.62 ft (0.494 m), result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	141	404	185	94	86	503	1290	113	153	122	151
2	290	188	339	174	90	84	439	1070	117	124	124	140
3	250	724	289	161	88	82	392	859	121	119	149	104
4	294	664	257	141	86	80	445	675	121	111	221	94
5	298	514	225	141	84	78	472	540	113	106	167	93
6	715	418	211	133	82	80	427	442	108	161	167	141
7	521	356	195	106	80	84	382	404	137	131	150	118
8	442	311	177	132	78	210	349	326	131	119	138	107
9	433	271	160	129	78	368	446	253	122	120	166	165
10	415	262	152	122	76	206	667	196	116	114	163	249
11	363	235	144	119	76	177	1420	177	114	108	126	309
12	346	207	138	247	74	158	2200	170	110	110	116	313
13	342	191	137	195	74	140	2240	170	107	102	113	313
14	298	184	132	168	74	120	1980	209	104	97	110	313
15	281	174	119	173	74	130	2250	179	105	97	118	313
16	258	168	114	155	82	140	2200	164	125	102	114	313
17	233	154	113	146	96	160	1950	156	109	137	104	315
18	213	165	102	147	90	903	1660	157	104	138	100	348
19	198	159	98	144	86	577	1420	160	102	139	97	323
20	188	152	96	138	84	512	1220	152	107	132	97	318
21	174	146	98	127	82	1590	1030	149	108	179	95	316
22	171	143	100	135	80	2110	694	145	103	293	93	313
23	164	142	112	133	80	857	468	137	99	176	92	313
24	217	150	123	116	80	607	343	132	97	147	91	309
25	198	238	244	120	80	605	270	127	123	130	89	293
26	188	1270	302	123	84	464	215	122	137	119	89	328
27	181	2560	289	111	84	386	187	119	137	113	88	317
28	184	1050	267	110	84	363	323	117	105	108	87	313
29	184	686	246	110	86	417	1020	115	105	123	87	312
30	161	507	227	100	---	539	1370	113	177	181	94	310
31	139	---	200	98	---	546	---	112	---	135	157	---
TOTAL	8513	12530	5810	4339	2386	12859	28982	9137	3477	4124	3724	7664
MEAN	275	418	187	140	82.3	415	966	295	116	133	120	255
MAX	715	2560	404	247	96	2110	2250	1290	177	293	221	348
MIN	139	141	96	98	74	78	187	112	97	97	87	93

CAL YR 1979 TOTAL 151245 MEAN 414 MAX 4580 MIN 79
WTR YR 1980 TOTAL 103545 MEAN 283 MAX 2560 MIN 74

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1978 to current year.

INSTRUMENTATION.--Temperature recorder since June 1978.

REMARKS.--No record May 26 to June 19, July 9 to Sept. 9, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water year 1978), 24.5°C July 7, 1978; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.5	11.5	12.0	8.0	5.5	7.0	3.5	2.5	3.0	2.0	.0	1.0
2	15.0	11.0	13.0	9.0	8.0	8.5	3.0	1.5	2.5	2.0	1.0	1.5
3	14.0	13.0	13.5	8.5	6.5	7.5	3.0	1.5	2.0	1.5	.0	1.0
4	14.0	12.5	13.0	7.0	6.0	6.5	2.5	1.5	2.0	.5	.0	.0
5	13.0	12.5	12.5	7.5	5.5	6.5	3.5	1.5	2.5	1.0	.0	.5
6	13.0	11.5	12.0	6.5	5.0	6.0	4.5	2.0	3.0	.5	.0	.0
7	11.5	10.0	10.5	6.5	6.0	6.5	4.5	3.5	4.5	.0	.0	.0
8	10.5	8.5	9.5	6.5	6.0	6.0	4.0	1.5	3.5	.5	.0	.0
9	9.0	8.5	8.5	7.0	5.0	6.0	1.5	.5	1.0	.5	.0	.0
10	8.5	7.5	8.0	8.0	7.0	7.5	3.0	1.5	2.0	1.0	.0	.0
11	8.5	7.0	7.5	7.0	6.5	6.5	4.5	3.0	3.5	1.5	.0	.5
12	8.0	7.5	8.0	6.5	5.5	6.0	6.0	3.0	4.5	1.0	.0	.0
13	9.0	8.0	8.5	6.5	5.0	6.0	5.5	3.0	4.0	.5	.0	.0
14	8.5	7.0	8.0	6.5	5.0	6.0	3.0	1.5	2.5	1.0	.0	.5
15	7.5	6.5	7.0	5.0	4.0	4.5	2.0	.5	1.5	2.0	1.0	1.0
16	9.0	6.5	7.5	4.5	2.0	3.5	3.0	1.0	2.0	2.5	.5	1.5
17	9.0	7.0	8.0	4.5	1.5	3.0	2.5	.0	.5	2.5	1.0	2.0
18	10.5	8.5	9.5	6.0	3.5	4.5	.5	.0	.0	3.5	2.5	3.0
19	11.5	8.5	10.0	6.5	4.5	5.5	.5	.0	.0	3.0	2.0	2.5
20	12.5	10.0	11.5	7.0	5.0	6.0	.5	.0	.0	2.0	.0	1.5
21	14.5	11.0	12.5	8.0	5.5	6.5	.5	.0	.0	1.0	.0	.5
22	15.0	12.0	13.0	7.5	6.5	7.0	1.0	.5	.5	.5	.0	.5
23	13.5	11.5	12.5	8.5	7.0	8.0	1.5	.5	1.0	1.5	.0	.5
24	12.5	9.0	11.0	10.0	8.5	9.5	4.0	1.5	2.5	1.0	.0	.5
25	9.0	7.5	8.5	10.0	9.5	9.5	6.0	4.0	5.0	1.0	.0	.5
26	7.0	6.0	6.5	16.5	10.0	11.5	5.0	3.5	4.5	.5	.5	.5
27	6.0	5.0	5.5	10.0	7.5	8.5	3.0	2.0	2.5	1.0	.5	.5
28	6.0	5.0	5.5	7.0	6.5	7.0	2.5	1.5	2.0	.5	.0	.5
29	6.5	6.0	6.5	6.5	4.5	5.5	3.0	2.0	2.5	.5	.0	.5
30	7.0	5.5	6.0	4.5	3.0	4.0	3.0	2.0	2.5	1.0	.0	.5
31	8.0	5.0	6.0	---	---	---	2.5	1.5	2.0	1.0	.0	.5
MONTH	15.0	5.0	9.5	16.5	1.5	6.5	6.0	.0	2.0	3.5	.0	.5

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.5	1.5	.0	.5	7.5	3.0	5.0	11.5	8.0	10.0
2	1.0	.0	.5	1.5	.0	.5	5.0	2.0	4.5	11.5	8.5	10.0
3	.5	.5	.5	1.5	.0	.5	8.0	2.5	5.5	13.5	9.0	11.0
4	1.0	.5	.5	1.5	.0	.5	7.0	5.0	6.0	12.5	8.5	10.5
5	1.0	.5	.5	.5	.5	.5	6.5	4.0	5.0	12.5	8.0	10.5
6	1.0	.0	.5	1.5	.0	.5	9.0	3.5	6.0	12.0	9.0	10.5
7	1.0	.5	.5	1.5	.0	.5	9.0	4.5	7.0	11.5	9.0	10.5
8	1.5	.0	.5	.5	.0	.0	8.0	6.5	7.0	10.5	8.5	9.5
9	1.5	.0	.5	1.0	.0	.0	8.0	7.0	7.0	10.0	8.0	9.0
10	1.5	.0	.5	.5	.0	.5	9.0	6.5	7.5	13.5	6.5	10.0
11	1.0	.0	.5	1.0	.0	.5	7.0	4.5	6.5	11.0	9.5	10.0
12	1.0	.0	.5	1.0	.0	.5	6.0	4.0	5.0	12.0	9.0	10.5
13	1.0	.0	.5	.0	.0	.0	7.0	4.5	5.5	13.0	10.5	11.5
14	1.0	.0	.5	.5	.0	.0	4.5	4.0	4.5	12.5	11.0	12.0
15	1.0	.5	.5	.5	.0	.0	6.5	4.5	5.5	12.5	9.5	11.0
16	.5	.0	.5	1.0	.0	.0	4.5	3.5	4.0	15.5	8.0	11.5
17	1.0	.0	.5	1.5	.0	.5	6.5	3.0	4.5	16.5	9.5	13.0
18	1.5	.0	.5	1.5	.0	.5	6.0	3.5	4.5	14.0	11.5	12.0
19	1.5	.0	.5	4.0	.0	2.0	8.0	3.0	5.5	13.5	11.0	12.5
20	1.5	.0	.5	5.0	1.5	3.0	6.5	4.0	5.5	17.0	11.5	14.0
21	.5	.5	.5	3.0	1.5	2.5	8.5	4.5	6.5	14.5	12.0	13.0
22	.5	.0	.5	2.0	1.5	1.5	9.0	3.5	6.5	17.5	11.5	14.5
23	.5	.5	.5	3.5	1.5	2.5	10.5	4.5	7.5	21.0	13.5	17.0
24	1.0	.0	.5	5.0	2.0	3.5	12.0	7.0	9.5	21.0	15.5	18.0
25	1.5	.0	.5	3.5	2.5	3.0	10.0	8.5	9.0	23.0	16.0	19.0
26	1.0	.0	.5	3.5	2.0	2.5	12.0	7.0	9.5	---	---	---
27	1.0	.0	.5	6.0	2.0	4.0	10.0	8.0	8.5	---	---	---
28	1.0	.0	.5	6.5	2.5	4.5	8.0	7.0	7.5	---	---	---
29	1.0	.0	.5	5.0	4.0	4.5	7.5	7.0	7.0	---	---	---
30	---	---	---	5.0	3.5	4.0	10.5	7.0	9.0	---	---	---
31	---	---	---	4.0	3.5	3.5	---	---	---	---	---	---
MONTH	1.5	.0	.5	6.5	.0	1.5	12.0	2.0	6.5	23.0	6.5	12.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	21.0	14.0	17.5				---	---	---
2	---	---	---	18.0	16.0	17.0				---	---	---
3	---	---	---	20.0	15.5	17.5				---	---	---
4	---	---	---	24.0	16.5	20.0				---	---	---
5	---	---	---	20.5	17.5	19.5				---	---	---
6	---	---	---	21.0	16.0	18.0				---	---	---
7	---	---	---	21.5	14.5	18.0				---	---	---
8	---	---	---	19.5	16.5	18.0				---	---	---
9	---	---	---	---	---	---				---	---	---
10	---	---	---	---	---	---				14.5	11.5	13.0
11	---	---	---	---	---	---				13.0	9.5	11.5
12	---	---	---	---	---	---				12.0	9.5	10.5
13	---	---	---	---	---	---				13.0	9.5	11.0
14	---	---	---	---	---	---				12.0	11.0	11.5
15	---	---	---	---	---	---				11.0	9.0	10.0
16	---	---	---	---	---	---				11.0	8.5	10.0
17	---	---	---	---	---	---				11.5	10.0	10.0
18	---	---	---	---	---	---				11.5	10.0	10.5
19	---	---	---	---	---	---				12.0	8.5	10.0
20	18.0	14.0	15.5	---	---	---				11.0	9.5	10.5
21	17.5	13.0	15.0	---	---	---				13.5	10.5	12.0
22	21.5	14.0	17.0	---	---	---				13.0	11.0	12.0
23	23.0	13.0	19.0	---	---	---				13.0	11.0	12.0
24	24.5	17.5	21.0	---	---	---				10.5	9.5	10.0
25	25.0	20.0	22.0	---	---	---				9.5	9.0	9.5
26	24.0	17.5	21.0	---	---	---				11.0	9.0	9.5
27	23.0	17.0	20.0	---	---	---				10.0	8.0	9.0
28	20.0	16.5	17.5	---	---	---				10.0	7.5	8.5
29	17.5	16.0	16.5	---	---	---				10.5	7.5	9.0
30	16.0	14.5	15.0	---	---	---				11.5	9.5	10.5
31	---	---	---	---	---	---				---	---	---
MONTH										14.5	7.5	10.5

01420000 LITTLE BEAVER KILL NEAR LIVINGSTON MANOR, NY

LOCATION.--Lat 41°52'23", long 74°47'52", Sullivan County, Hydrologic Unit 02040102, on right bank 100 ft (30 m) downstream from private bridge, 0.2 mi (0.3 km) west from interchange 97 on State Highway 17, 2.5 (4.0 km) southeast of Livingston Manor, and 3 mi (5 km) upstream from Cattail Brook.

DRAINAGE AREA.--19.8 mi^2 (51.3 km^2).

PERIOD OF RECORD.--July 1924 to current year.

REVISED RECORDS.--WSP 1302: 1930(M), 1933(M), 1936-37(M), 1942-46(M). WSP 1432: 1928(M).

GAGE.--Water-stage recorder. Concrete control since November 1933. Datum of gage is 1,496.69 ft (456.191 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1939, nonrecording gage.

REMARKS.--Records fair except those for winter periods and period of no gage height record, Mar. 18 to Apr. 6, which are poor. Some diversion from Lily Pond for village of Liberty water supply.

AVERAGE DISCHARGE.--56 years, 45.1 ft^3/s (1.277 m^3/s), 30.93 in/yr (786 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft^3/s (96.9 m^3/s) Aug. 26, 1928, gage height, 8.7 ft (2.65 m), from floodmarks, from rating curve extended above 1,700 ft^3/s (48.1 m^3/s); minimum, 0.9 ft^3/s (0.025 m^3/s) July 10, 1962; minimum gage height, 1.23 ft (0.375 m) Aug. 1, 3, 5, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 730 ft^3/s (20.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2000	1,700	48.1	5.69	1.734	[a]Mar. 21	Unknown	*2,000	56.6	*6.05	1.844

[a] From floodmark.

Minimum discharge, 1.5 ft^3/s (0.04 m^3/s) Sept. 13, 23, 24, 25, 29, 30, gage height, 1.35 ft (0.411 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	19	69	28	12	10	110	62	10	24	4.3	2.9
2	173	32	59	26	12	8.8	90	50	9.6	15	15	3.0
3	116	154	49	25	11	8.2	70	42	9.6	12	25	4.0
4	104	83	46	22	12	7.8	100	36	8.9	11	11	2.5
5	128	57	42	21	10	7.4	140	35	7.9	20	7.3	2.8
6	195	46	38	19	10	8.0	100	31	7.4	44	6.6	3.8
7	101	42	38	17	11	12	67	32	14	19	5.6	2.7
8	81	36	34	16	9.4	22	60	28	14	14	4.9	2.1
9	122	34	30	16	9.2	35	478	28	11	13	4.4	1.8
10	93	46	28	17	9.0	29	304	30	10	9.7	4.2	2.5
11	66	44	25	19	8.8	24	129	28	8.6	8.8	4.7	2.0
12	84	37	25	20	8.6	16	89	29	7.6	8.1	4.5	1.8
13	86	34	24	23	8.4	12	82	28	6.8	6.5	4.0	1.8
14	69	34	23	22	8.2	11	84	35	6.2	6.5	3.7	1.9
15	52	30	19	22	8.0	9.6	208	25	6.4	6.1	9.6	2.0
16	46	31	19	19	7.8	9.2	102	23	8.8	6.4	5.3	1.8
17	40	29	19	18	7.8	13	73	20	6.4	6.8	4.1	3.0
18	36	31	19	17	7.6	180	59	28	5.4	6.0	3.7	6.7
19	32	30	19	17	7.4	150	50	40	5.0	5.4	4.6	3.2
20	30	28	19	16	7.4	100	44	31	7.5	5.0	4.9	2.2
21	28	26	20	16	7.2	600	38	25	6.2	6.9	4.3	2.2
22	25	24	22	12	7.0	1200	31	29	5.2	12	4.0	2.2
23	24	25	22	15	7.0	400	32	20	4.5	9.8	3.4	1.8
24	30	28	29	16	7.0	200	30	17	4.4	7.8	3.0	1.7
25	26	55	110	17	7.0	120	26	15	4.8	5.4	2.7	1.7
26	23	517	79	16	7.4	90	25	14	3.7	4.8	2.4	4.2
27	22	352	52	15	9.0	60	26	12	3.7	15	2.3	2.6
28	22	154	42	14	10	56	74	10	3.7	6.0	2.3	1.8
29	23	110	38	14	11	90	140	10	31	4.7	2.2	1.8
30	22	86	34	13	---	160	84	9.5	73	4.8	2.2	1.8
31	19	---	30	13	---	130	---	9.4	---	4.0	2.3	---
TOTAL	2131	2254	1122	561	258.2	3779.0	2945	831.9	311.3	328.5	168.5	76.3
MEAN	68.7	75.1	36.2	18.1	8.90	122	98.2	26.8	10.4	10.6	5.44	2.54
MAX	213	517	110	28	12	1200	478	62	73	44	25	6.7
MIN	19	19	19	12	7.0	7.4	25	9.4	3.7	4.0	2.2	1.7
CFSM	3.47	3.79	1.83	.91	.45	6.16	4.96	1.35	.53	.54	.28	.13
IN.	4.00	4.23	2.11	1.05	.49	7.10	5.53	1.56	.58	.62	.32	.14

CAL YR 1979 TOTAL 20759.5 MEAN 56.9 MAX 606 MIN 3.7 CFSM 2.87 IN 39.00
WTR YR 1980 TOTAL 14766.7 MEAN 40.3 MAX 1200 MIN 1.7 CFSM 2.04 IN 27.74

01420500 BEAVER KILL AT COOKS FALLS, NY

LOCATION.--Lat 41°56'47", long 74°58'48", Delaware County, Hydrologic Unit 02040102, on left bank 66 ft (20 m) downstream from road bridge in Cooks Falls, and 5.5 mi (8.8 km) downstream from Willowemoc Creek.

DRAINAGE AREA.--241 mi^2 (624 km^2).

PERIOD OF RECORD.--July 1913 to current year.

REVISED RECORDS.--WSP 521: Drainage area. WSP 781: 1933(M). WSP 891: 1936-39(M). WSP 1202: 1950. WSP 1232: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 1,151.70 ft (351.038 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1933, nonrecording gage at site 125 ft (38 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Slight diversion at headwaters into Cooper Lake for water supply of Kingston.

AVERAGE DISCHARGE.--66 years, 561 ft^3/s (15.89 m^3/s), 31.61 in/yr (803 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft^3/s (895 m^3/s) Mar. 31, 1951, gage height, 16.02 ft (4.883 m), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of slope-area measurement at gage height 15.52 ft (4.730 m); minimum, 16 ft^3/s (0.45 m^3/s) Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,700 ft^3/s (130 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2200	15,900	450	12.27	3.740	Apr. 10	0615	5,770	163	8.12	2.475
Mar. 21	2230	*23,800	674	*14.30	4.359						

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Sept. 25; gage height, 0.74 ft (0.226 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	293	917	400	170	96	1290	892	151	523	83	61
2	1730	355	780	370	160	92	1180	756	148	330	129	56
3	1120	1800	664	330	150	90	994	661	146	268	221	53
4	1240	1270	601	280	140	88	1500	576	139	233	283	51
5	1160	923	560	260	140	90	1590	513	129	220	183	50
6	2990	770	521	240	130	120	1170	472	120	470	152	64
7	1570	687	502	230	130	160	996	496	153	314	132	68
8	1240	622	459	220	120	220	912	434	170	252	117	56
9	1340	556	405	210	120	350	2620	395	147	233	106	49
10	1320	584	390	200	120	290	4450	366	142	205	98	49
11	1010	597	367	240	120	240	2450	351	132	188	94	47
12	991	518	347	540	110	200	1650	354	121	180	91	44
13	1060	472	343	330	110	160	1430	334	112	163	87	43
14	864	468	332	382	110	140	1240	360	105	152	83	45
15	760	436	296	369	110	130	2090	319	101	139	100	46
16	673	433	288	328	100	120	1580	284	126	134	93	45
17	601	402	290	309	100	130	1190	260	118	129	80	44
18	541	408	260	302	100	2000	982	277	100	124	73	66
19	492	393	260	299	100	1500	837	374	92	114	72	62
20	465	367	280	285	100	1190	731	314	96	108	72	52
21	436	350	290	240	98	7640	644	279	103	104	69	48
22	396	338	299	240	96	9440	558	271	95	184	66	47
23	372	330	282	230	94	2700	498	247	86	147	64	46
24	433	330	308	202	94	1840	456	226	81	125	61	42
25	402	537	867	209	94	1640	432	217	78	106	58	41
26	361	3890	843	240	92	1160	407	200	76	96	55	54
27	336	6800	629	230	92	947	386	184	72	94	53	52
28	341	2300	539	220	110	924	541	176	70	90	52	46
29	358	1530	501	210	100	1500	1530	163	149	96	52	44
30	327	1150	474	190	---	2030	1160	156	1250	115	51	43
31	303	---	439	180	---	1670	---	152	---	90	66	---
TOTAL	26252	29909	14333	8515	3310	38897	37494	11059	4608	5726	2996	1514
MEAN	847	997	462	275	114	1255	1250	357	154	185	96.6	50.5
MAX	2990	6800	917	540	170	9440	4450	892	1250	523	283	68
MIN	303	293	260	180	92	88	386	152	70	90	51	41
CFSM	3.52	4.14	1.92	1.14	.47	5.21	5.19	1.48	.64	.77	.40	.21
IN.	4.05	4.62	2.21	1.31	.51	6.00	5.79	1.71	.71	.88	.46	.23

CAL YR 1979 TOTAL 271702 MEAN 744 MAX 8780 MIN 73 CFSM 3.09 IN 41.94
WTR YR 1980 TOTAL 184613 MEAN 504 MAX 9440 MIN 41 CFSM 2.09 IN 28.50

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY

LOCATION.--Lat 41°58'23", long 75°10'28", Delaware County, Hydrologic Unit 02040102, on left bank 3,000 ft (914 m) upstream from bridge on County highway 28 at Fishs Eddy, 0.6 mi (1.0 km) upstream from Fish Creek, 4.2 mi (6.8 km) downstream from Beaver Kill, and 11 mi (18 km) upstream from the confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--783 mi^2 (2,028 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.96 ft (291.377 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1928, nonrecording gage and Sept. 28, 1928 to Nov. 1, 1967, water-stage recorder at site 3,000 ft (914 m) downstream at datum 5.0 ft (1.52 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi^2 (961 km^2) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,300 ft^3/s (1,510 m^3/s) Aug. 24, 1933, gage height, 20.60 ft (6.279 m) at former site and datum, from rating curve extended above 22,000 ft^3/s (623 m^3/s); minimum, 52 ft^3/s (1.47 m^3/s) July 23, 1964, gage height, 1.16 ft (0.354 m) at former site and datum; minimum daily, 68 ft^3/s (1.93 m^3/s) Aug. 29, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of 23.6 ft (7.19 m) at former site and datum, from description obtained in April 1939, from local residents who had experienced the flood (discharge, about 70,000 ft^3/s or 1,980 m^3/s, from rating curve extended above 22,000 ft^3/s or 623 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,000 ft^3/s (793 m^3/s) Mar. 22; gage height, 12.78 ft (3.895 m); minimum discharge, 164 ft^3/s (4.64 m^3/s) Aug. 28, 29, gage height, 2.92 ft (0.890 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	907	565	1620	680	240	200	2270	2790	324	847	250	270
2	2250	649	1390	620	240	200	2050	2370	322	551	272	249
3	1340	2800	1190	560	240	200	1780	1990	331	466	398	218
4	1650	2440	1040	500	230	200	2220	1650	319	419	578	196
5	1410	1780	943	480	230	200	2510	1400	301	391	415	192
6	4000	1450	866	450	230	200	2020	1210	285	686	372	238
7	2420	1260	824	430	230	220	1780	1160	329	541	330	238
8	1980	1110	755	400	220	450	1620	968	366	449	299	214
9	1900	997	682	390	220	740	2890	813	336	431	298	246
10	2000	978	647	380	220	450	5790	708	321	401	287	315
11	1590	988	614	400	220	400	4400	654	309	373	262	374
12	1480	872	583	600	210	370	4330	650	289	373	242	380
13	1590	805	575	700	210	340	4100	620	274	336	232	379
14	1330	783	567	1100	210	310	3650	682	262	322	226	380
15	1180	748	500	746	210	310	4690	655	258	303	253	384
16	1080	740	450	598	210	310	4300	559	305	294	244	382
17	972	692	400	567	210	400	3640	520	289	311	220	388
18	898	702	370	560	200	4100	3120	510	264	310	205	452
19	836	687	370	545	200	2490	2700	611	251	297	199	417
20	785	655	380	500	200	1980	2360	573	259	286	197	400
21	744	628	390	450	200	8580	2070	519	268	282	193	392
22	705	614	400	410	200	14400	1610	505	255	498	187	387
23	666	604	450	370	200	4430	1270	472	244	383	183	383
24	777	606	530	320	200	3000	1020	440	232	322	179	378
25	744	860	1210	330	200	2870	874	418	240	285	174	358
26	689	4320	1390	350	200	2120	785	398	255	257	170	410
27	659	11500	1130	320	200	1750	720	373	255	243	167	399
28	651	4190	978	300	200	1670	963	360	228	241	164	388
29	674	2710	899	280	210	2170	2980	343	236	258	164	384
30	622	2020	845	260	---	3000	3170	331	1470	340	171	378
31	579	---	775	250	---	2730	---	325	---	271	275	---
TOTAL	39108	49753	23763	14846	6190	60790	77682	25577	9677	11767	7806	10169
MEAN	1262	1658	767	479	213	1961	2589	825	323	380	252	339
MAX	4000	11500	1620	1100	240	14400	5790	2790	1470	847	578	452
MIN	579	565	370	250	200	200	720	325	228	241	164	192

CAL YR 1979 TOTAL 480113 MEAN 1315 MAX 13900 MIN 166
WTR YR 1980 TOTAL 337128 MEAN 921 MAX 14400 MIN 164

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.
CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1971-74 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
NUTRIENT DATA: 1971-75 (d).
BIOLOGICAL DATA:
Bacteria--1971 (c), 1973-75 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1967 to current year.

INSTRUMENTATION.--Temperature recorder since November 1967.

REMARKS.--Prior to May 28, 1980, during periods of low flow the recorded temperature was judged to be not representive of the mean stream temperature due to solar radiation and lack of mixing of the water near the temperature sensor with the water in the mainstream and only those periods when the gage height exceeded 5.3 are reported. The equipment was moved May 28, 1980 eliminating the problem. Recorder malfunctioned June 22-30, Aug. 3-11.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75, 1978), 31.5°C Aug. 2, 1975; minimum (water years 1968-76, 1978-79), freezing point on many days during winter periods, except water year 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 28.5°C July 14.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---						
2	---	---	---	---	---	---						
3	---	---	---	---	---	---						
4	---	---	---	---	---	---						
5	---	---	---	---	---	---						
6	16.0	14.5	15.0	---	---	---						
7	---	---	---	---	---	---						
8	---	---	---	---	---	---						
9	---	---	---	---	---	---						
10	---	---	---	---	---	---						
11	---	---	---	---	---	---						
12	---	---	---	---	---	---						
13	---	---	---	---	---	---						
14	---	---	---	---	---	---						
15	---	---	---	---	---	---						
16	---	---	---	---	---	---						
17	---	---	---	---	---	---						
18	---	---	---	---	---	---						
19	---	---	---	---	---	---						
20	---	---	---	---	---	---						
21	---	---	---	---	---	---						
22	---	---	---	---	---	---						
23	---	---	---	---	---	---						
24	---	---	---	---	---	---						
25	---	---	---	---	---	---						
26	---	---	---	---	---	---						
27	---	---	---	12.0	9.0	10.5						
28	---	---	---	9.0	8.0	8.5						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				---	---	---	---	---	---	13.0	10.5	12.0
2				---	---	---	---	---	---	---	---	---
3				---	---	---	---	---	---	---	---	---
4				---	---	---	---	---	---	---	---	---
5				---	---	---	---	---	---	---	---	---
6				---	---	---	---	---	---	---	---	---
7				---	---	---	---	---	---	---	---	---
8				---	---	---	---	---	---	---	---	---
9				---	---	---	---	---	---	---	---	---
10				---	---	---	8.0	7.0	7.5	---	---	---
11				---	---	---	8.5	6.5	7.0	---	---	---
12				---	---	---	8.0	6.0	7.0	---	---	---
13				---	---	---	9.0	6.5	8.0	---	---	---
14				---	---	---	7.5	6.0	6.5	---	---	---
15				---	---	---	8.5	6.5	7.5	---	---	---
16				---	---	---	7.0	4.5	6.0	---	---	---
17				---	---	---	7.5	3.5	5.5	---	---	---
18				---	---	---	7.5	5.0	6.0	---	---	---
19				---	---	---	9.5	5.0	7.0	---	---	---
20				---	---	---	---	---	---	---	---	---
21				---	---	---	---	---	---	---	---	---
22				2.5	1.5	2.0	---	---	---	---	---	---
23				5.0	2.0	3.0	---	---	---	---	---	---
24				5.5	3.0	4.0	---	---	---	---	---	---
25				4.5	3.0	3.5	---	---	---	---	---	---
26				---	---	---	---	---	---	---	---	---
27				---	---	---	---	---	---	---	---	---
28				---	---	---	---	---	---	---	---	---
29				---	---	---	---	---	---	21.5	15.5	18.5
30				5.0	4.0	4.5	12.5	8.5	10.5	20.0	17.0	18.5
31				4.5	4.0	4.0	---	---	---	20.5	17.0	18.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	17.5	20.0	22.0	18.0	20.0	27.5	24.0	25.5	24.5	21.5	23.0
2	21.5	19.5	20.5	25.0	18.0	20.5	25.5	22.0	23.5	25.0	20.5	23.0
3	21.5	19.5	20.0	24.0	18.5	21.0	---	---	---	24.0	19.5	21.5
4	19.5	17.0	18.5	25.0	21.0	23.5	---	---	---	24.0	19.5	22.5
5	21.0	15.5	18.0	24.5	20.0	22.0	---	---	---	22.5	19.5	21.0
6	21.0	16.0	18.5	25.0	20.0	22.5	---	---	---	24.0	19.5	21.0
7	19.0	17.0	18.0	26.0	22.0	24.0	---	---	---	23.0	18.0	20.5
8	17.0	13.5	16.0	27.0	22.5	24.0	---	---	---	21.5	17.5	19.5
9	13.5	11.0	12.0	27.0	23.0	25.0	---	---	---	20.5	16.5	18.5
10	14.5	10.5	12.5	27.5	22.5	25.0	---	---	---	19.0	14.0	16.0
11	14.0	11.0	13.0	28.0	22.5	25.0	---	---	---	17.5	13.5	15.0
12	19.0	12.0	15.5	27.0	23.0	24.5	24.0	21.0	22.5	16.0	13.0	14.5
13	21.0	14.5	18.0	28.0	24.0	26.0	24.0	21.0	22.5	16.5	14.0	15.0
14	23.5	17.0	20.5	28.5	22.0	24.5	22.5	20.0	21.0	16.0	13.5	15.0
15	24.5	19.5	22.0	23.5	21.5	22.5	24.0	20.5	22.0	13.5	11.0	12.5
16	22.0	18.5	20.0	24.5	20.5	22.5	22.5	19.5	20.5	14.0	11.0	13.0
17	22.5	16.5	19.5	25.0	21.0	23.0	23.5	17.0	19.5	13.5	12.5	13.0
18	21.5	17.5	19.0	26.0	21.5	24.0	23.0	19.5	21.0	13.5	11.5	12.5
19	23.0	17.5	20.0	26.5	22.0	24.5	22.5	19.5	20.5	15.0	11.0	13.0
20	20.0	15.5	17.5	26.5	22.5	24.0	24.5	20.0	21.5	14.5	12.0	13.5
21	22.0	16.0	18.5	25.0	22.0	23.5	24.5	20.5	22.5	17.0	13.0	15.0
22	---	---	---	24.0	21.0	22.5	24.0	20.0	21.5	16.5	14.5	15.5
23	---	---	---	25.0	21.0	22.5	23.0	20.0	21.0	16.5	13.5	15.0
24	---	---	---	25.5	22.0	24.0	24.5	20.5	22.5	15.0	12.0	13.5
25	---	---	---	25.5	22.0	23.5	25.5	21.0	23.5	12.5	11.0	11.5
26	---	---	---	25.0	22.0	23.0	25.5	21.5	23.5	13.0	10.5	11.5
27	---	---	---	24.5	20.5	22.0	26.5	22.5	24.5	12.5	9.5	10.5
28	---	---	---	24.5	21.5	23.0	26.0	22.5	24.0	12.5	9.0	10.5
29	---	---	---	25.5	22.5	24.0	26.0	22.0	23.0	13.0	9.0	10.5
30	---	---	---	26.5	22.0	24.0	26.0	22.5	24.0	14.5	11.0	12.0
31	---	---	---	27.5	23.5	25.0	25.5	21.5	23.0	---	---	---
MONTH	24.5	10.5	18.0	28.5	18.0	23.5	27.5	17.0	22.5	25.0	9.0	15.5

01423000 WEST BRANCH DELAWARE RIVER AT WALTON, NY

LOCATION.--Lat 42°09'58", long 75°08'26", Delaware County, Hydrologic Unit 02040101, on left bank at west end of fairgrounds at Walton, and 100 ft (30 m) downstream from West Brook.

DRAINAGE AREA.--331 mi^2 (856 km^2).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,190.30 ft (362.803 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--30 years, 593 ft^3/s (16.79 m^3/s), 24.33 in/yr (618 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft^3/s (493 m^3/s) Mar. 14, 1977, gage height, 14.16 ft (4.316 m); minimum, 12 ft^3/s (0.34 m^3/s) Sept. 15, Nov. 22, 1964; minimum gage height, 1.86 ft (0.567 m) Nov. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,600 ft^3/s (130 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0430	8,390	238	10.70	3.261	Mar. 22	0945	*10,000	283	*11.45	3.490
Mar. 18	0715	7,290	206	10.14	3.091						

Minimum discharge, 27 ft^3/s (0.76 m^3/s) Aug. 28, gage height, 2.21 ft (0.674 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	295	1120	403	200	110	1720	997	119	243	53	82
2	766	469	940	399	195	110	1450	899	116	155	51	74
3	573	2530	787	348	183	100	1240	790	115	129	94	96
4	714	1750	704	279	184	100	1360	682	114	113	102	78
5	694	1360	636	270	184	100	1580	601	107	115	73	100
6	2410	1140	586	270	185	120	1230	539	98	256	65	197
7	1390	989	551	260	174	170	1060	525	147	171	57	106
8	1180	881	497	260	177	1200	953	463	141	133	52	82
9	1360	755	431	250	169	2450	1330	417	134	126	48	70
10	1210	755	412	250	163	815	2140	379	153	120	44	65
11	976	684	387	270	162	724	1580	345	136	106	43	58
12	916	595	371	600	151	400	1360	331	112	99	43	54
13	893	542	360	270	151	350	1290	339	99	90	43	51
14	745	525	345	320	147	310	1150	479	90	82	43	51
15	670	497	312	431	147	300	1660	390	86	76	77	53
16	613	493	295	341	140	310	1330	315	119	71	71	51
17	542	454	345	301	140	826	1150	276	118	67	55	53
18	501	473	289	302	130	5330	1020	262	92	63	48	72
19	465	427	280	296	130	1830	904	284	83	59	45	69
20	427	395	280	277	120	1730	795	265	86	57	42	62
21	391	371	280	229	120	3800	717	243	94	66	40	56
22	360	352	295	272	120	8220	621	237	91	78	38	51
23	337	345	299	271	110	3390	557	214	80	63	38	47
24	542	360	395	195	110	2420	507	194	73	59	36	45
25	469	599	704	255	110	2750	466	179	68	55	34	43
26	412	1650	670	250	110	1770	450	162	63	52	33	70
27	375	6220	573	240	110	1440	412	150	61	49	32	74
28	367	2770	534	230	110	1420	598	141	59	46	31	62
29	371	1890	525	220	120	1930	1560	132	80	58	31	54
30	341	1410	509	210	---	2520	1140	123	359	61	54	50
31	316	---	461	210	---	2030	---	118	---	54	131	---
TOTAL	21753	31976	15173	8979	4252	49075	33330	11471	3293	2972	1647	2076
MEAN	702	1066	489	290	147	1583	1111	370	110	95.9	53.1	69.2
MAX	2410	6220	1120	600	200	8220	2140	997	359	256	131	197
MIN	316	295	280	195	110	100	412	118	59	46	31	43
CFSM	2.12	3.22	1.48	.88	.44	4.78	3.36	1.12	.33	.29	.16	.21
IN.	2.44	3.59	1.71	1.01	.48	5.52	3.75	1.29	.37	.33	.19	.23

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CAL YR 1979  TOTAL  276304   MEAN 757   MAX  10900   MIN 55   CFSM 2.29   IN 31.05
WTR YR 1980  TOTAL  185997   MEAN 508   MAX   8220   MIN 31   CFSM 1.54   IN 20.90
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01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY

LOCATION.--Lat 42°04'29", long 75°23'47", Delaware County, Hydrologic Unit 02040101, on right bank at Stilesville, 0.5 mi (0.8 km) upstream from Cold Spring Creek, 1.4 mi (2.3 km) downstream from Cannonsville Dam, and 2.0 mi (3.2 km) northeast of Deposit. Water-quality sampling site at discharge station.

DRAINAGE AREA.--456 mi^2 (1,181 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 992.23 ft (302.432 m) National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York). Prior to Oct. 1, 1964, at site 600 ft (183 m) downstream at datum 1.37 ft (0.418 m) higher.

REMARKS.--Records good above 2,000 ft^3/s (56.6 m^3/s), poor below. Subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft^3/s (496 m^3/s) Jan. 22, 1959, gage height, 9.01 ft (2.746 m), site and datum then in use; minimum daily 7.2 ft^3/s (0.20 m^3/s) Feb. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,980 ft^3/s (84.4 m^3/s) Mar. 31, and Apr. 1, gage height, 9.43 ft (2.874 m); minimum daily, 37 ft^3/s (1.05 m^3/s) Mar. 11-13; minimum gage height, 3.80 ft (1.158 m) Mar 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	40	980	39	510	540	2900	1730	570	335	1050	590
2	74	49	1110	39	350	560	2580	1650	350	316	1150	646
3	48	47	1110	39	370	580	2260	1530	195	316	462	802
4	48	43	994	39	400	454	2050	1350	424	316	308	766
5	46	42	670	39	470	202	2150	1210	580	320	308	1110
6	48	41	418	38	382	382	2050	1060	646	320	304	1080
7	47	41	296	38	646	350	1860	967	376	320	312	790
8	48	41	335	38	600	55	1650	863	182	320	778	863
9	48	41	394	38	430	40	1690	778	394	325	730	802
10	48	41	424	191	400	38	2350	694	335	325	400	790
11	47	40	430	99	446	37	2580	634	93	802	296	790
12	47	40	438	43	376	37	2380	520	171	646	388	1050
13	48	38	446	40	376	37	2190	296	790	335	446	1080
14	47	38	446	39	570	38	2010	210	814	320	494	446
15	47	38	418	39	634	112	2030	140	382	325	1080	418
16	47	38	394	38	610	47	2070	92	530	340	863	454
17	47	38	388	38	400	38	1910	54	478	325	622	446
18	47	38	360	38	370	47	1730	49	520	766	622	424
19	47	38	335	38	320	42	1570	49	560	718	590	954
20	47	38	316	38	220	42	1400	48	915	325	754	1010
21	47	38	280	38	550	56	1270	47	1080	312	790	412
22	47	38	146	38	256	63	1140	47	754	312	1090	277
23	47	38	80	38	48	48	1010	47	850	312	1170	360
24	52	40	42	355	110	47	941	47	967	470	954	304
25	48	39	41	288	191	51	826	47	967	1040	967	274
26	48	45	40	223	502	51	766	46	889	928	994	1010
27	48	45	64	73	462	394	730	119	1110	622	1040	1060
28	48	43	46	102	718	1010	766	217	1240	340	1050	458
29	48	92	40	202	754	1550	1270	418	718	658	1260	426
30	46	600	40	177	---	2450	1670	424	486	570	1200	1130
31	39	---	39	370	---	2880	---	430	---	670	928	---
TOTAL	1668	1828	11560	2892	12471	12278	51799	15813	18366	14349	23400	21022
MEAN	53.8	60.9	373	93.3	430	396	1727	510	612	463	755	701
MAX	224	600	1110	370	754	2880	2900	1730	1240	1040	1260	1130
MIN	39	38	39	38	48	37	730	46	93	312	296	274

CAL YR 1979 TOTAL 239420 MEAN 656 MAX 10800 MIN 31
WTR YR 1980 TOTAL 187446 MEAN 512 MAX 2900 MIN 37

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.
CHEMICAL DATA: 1959-60 (a) unpublished; 1969 (a); 1970 (a) unpublished; 1971, 1973 (b); 1974 (d); 1975 (b).
MINOR ELEMENTS DATA: 1971 (b).
NUTRIENT DATA: 1970 (a) unpublished; 1971, 1973 (b); 1974 (d); 1975 (b).
BIOLOGICAL DATA:
Bacteria--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1962 to current year.

INSTRUMENTATION.--Temperature recorder since October 1962.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. No record July 5-6 due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1963-78, 1980), 30.5°C July 2, 1963; minimum, freezing point on many days during winter periods, except 1969 and 1973.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 16.0°C on Sept. 29; minimum, freezing point on several days during January and March.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.5	7.5	8.0	10.5	5.5	8.0	7.5	7.0	7.5	4.5	1.5	2.5
2	12.0	8.5	10.0	9.5	8.0	9.0	7.5	7.0	7.0	3.5	2.0	2.5
3	12.0	9.0	10.5	8.5	6.0	7.5	7.5	7.0	7.0	3.0	1.0	2.0
4	11.5	9.0	10.0	8.0	4.5	6.5	7.0	7.0	7.0	2.5	1.0	1.5
5	10.5	9.0	10.0	9.5	5.0	7.0	7.0	7.0	7.0	4.0	1.0	2.5
6	13.5	8.0	10.0	8.0	5.0	6.5	7.5	6.5	7.0	3.5	.5	1.5
7	9.5	7.5	8.5	7.5	6.0	7.0	7.0	6.5	7.0	2.0	.5	1.5
8	11.0	6.5	8.0	8.5	5.5	6.5	6.5	5.5	6.0	3.0	1.0	1.5
9	9.0	7.0	8.0	8.0	5.5	7.0	6.5	5.5	6.0	2.0	.5	1.5
10	8.5	6.5	7.0	9.0	7.0	8.5	7.0	6.0	6.5	3.0	.5	1.5
11	9.0	6.0	7.0	7.5	6.5	7.0	7.5	6.0	6.5	5.0	1.0	2.5
12	8.0	6.0	7.0	7.0	5.5	6.5	7.5	6.5	7.0	5.0	.0	1.5
13	9.5	7.0	8.0	8.0	5.5	6.5	6.5	6.0	6.0	2.0	.0	1.0
14	8.5	6.5	7.5	7.0	5.0	6.0	6.0	5.5	5.5	3.0	1.0	2.0
15	7.5	6.0	6.5	6.5	4.0	5.0	6.0	5.5	5.5	4.5	2.0	3.0
16	10.5	6.0	8.0	5.5	3.0	4.5	6.5	5.5	6.0	5.0	1.0	2.5
17	9.5	6.5	8.0	8.5	3.0	5.5	6.0	4.0	4.5	4.5	1.5	3.0
18	11.0	8.5	9.5	8.0	5.5	6.5	5.0	4.0	4.5	4.0	2.5	3.0
19	13.0	8.5	10.0	9.5	6.0	7.0	4.5	4.0	4.0	3.0	1.5	2.5
20	13.0	9.0	10.5	10.0	6.0	7.5	5.0	4.0	4.5	2.5	.0	1.5
21	14.5	9.0	10.5	10.0	6.5	8.0	5.0	3.5	4.0	1.5	.0	1.0
22	13.5	9.0	10.5	8.5	7.0	8.0	4.5	4.0	4.5	2.0	1.0	1.5
23	13.5	8.5	10.5	11.0	7.5	8.5	6.0	4.5	5.0	2.5	.0	1.5
24	10.0	7.5	8.5	10.5	8.5	9.5	6.0	5.0	5.5	2.5	.0	2.0
25	7.5	6.5	7.0	10.0	8.5	9.0	7.5	6.0	6.5	3.0	2.0	2.5
26	7.5	5.0	6.0	11.5	9.0	10.5	5.5	3.0	4.5	2.5	1.5	2.0
27	6.5	4.5	5.5	9.5	6.5	8.0	4.0	2.5	3.0	2.5	1.0	1.5
28	6.5	5.0	6.0	7.5	5.5	6.5	4.0	2.0	3.0	2.5	1.0	1.5
29	7.0	6.5	6.5	6.0	4.0	5.0	3.5	3.0	3.0	2.5	1.0	2.0
30	7.0	5.5	6.5	7.5	5.0	7.0	4.0	2.5	3.0	2.0	.0	1.0
31	11.0	5.0	7.0	---	---	---	4.5	1.5	3.0	2.5	.0	2.0
MONTH	14.5	4.5	8.5	11.5	3.0	7.0	7.5	1.5	5.5	5.0	.0	2.0

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	1.5	2.0	3.0	1.5	2.5	3.0	2.5	2.5	10.5	8.5	10.0
2	2.5	1.5	2.0	3.5	2.0	2.5	2.5	2.5	2.5	10.5	9.0	10.0
3	2.5	1.5	2.0	3.5	2.0	2.5	3.0	2.5	2.5	12.0	8.0	9.5
4	3.0	2.0	2.5	4.0	2.0	3.0	3.0	2.5	2.5	10.5	8.0	9.5
5	3.0	2.0	2.5	3.0	2.5	2.5	3.5	2.5	3.0	11.0	7.0	9.5
6	3.5	2.0	2.5	4.0	2.0	3.0	3.5	2.5	3.0	10.0	8.0	9.0
7	3.0	2.5	2.5	4.5	2.5	3.5	4.0	2.5	3.0	11.0	6.5	8.5
8	3.5	2.0	2.5	3.5	3.0	3.0	4.0	3.0	3.5	9.5	7.5	8.5
9	3.5	2.5	2.5	6.5	2.0	3.5	4.0	3.5	3.5	9.5	8.0	9.0
10	3.5	2.0	2.5	4.5	1.0	2.5	4.0	3.0	3.5	10.5	8.0	9.0
11	3.0	2.0	2.5	3.5	.0	2.0	4.0	3.0	3.5	10.5	9.0	10.0
12	3.0	2.0	2.5	4.0	.0	1.5	4.0	3.5	3.5	11.5	10.0	10.5
13	3.5	2.0	2.5	1.5	.0	.5	4.0	3.5	3.5	12.0	10.0	11.0
14	3.0	2.5	2.5	2.0	.0	1.0	4.0	3.5	3.5	10.5	9.0	10.0
15	3.0	2.5	2.5	2.5	.0	1.5	4.0	3.5	4.0	10.5	8.0	9.0
16	2.5	2.0	2.5	7.0	.0	3.0	3.5	3.5	3.5	13.5	6.5	9.5
17	3.0	1.5	2.0	5.5	2.0	4.0	4.5	3.5	3.5	15.5	6.0	10.0
18	3.5	2.0	2.5	5.5	2.0	3.5	4.5	3.5	4.0	9.0	7.0	8.0
19	4.5	2.0	2.5	9.0	.5	4.5	5.0	3.5	4.0	9.5	6.5	8.0
20	4.5	2.0	3.0	10.5	2.5	6.0	5.0	4.0	4.5	14.0	6.5	9.5
21	3.0	2.5	3.0	6.5	4.5	5.5	6.0	4.5	5.0	11.5	6.5	8.5
22	3.0	2.0	2.5	4.5	1.5	3.0	6.5	5.0	5.5	14.5	6.5	9.5
23	3.5	1.5	2.5	5.5	2.0	3.5	8.5	5.0	6.5	14.5	6.5	10.0
24	3.5	2.5	3.0	8.5	3.0	5.0	8.5	6.5	7.5	14.0	7.0	10.0
25	4.0	1.0	2.5	4.0	3.0	3.5	9.5	7.0	8.0	15.5	7.0	10.5
26	3.0	2.0	2.5	3.5	2.0	2.5	10.5	7.0	9.0	14.0	6.0	9.5
27	3.0	2.0	2.5	3.0	1.0	2.0	9.5	9.0	9.5	12.0	4.5	8.0
28	3.0	2.0	2.5	3.0	2.0	2.5	9.5	9.0	9.5	10.5	4.5	6.5
29	2.5	1.5	2.0	2.5	2.5	2.5	9.0	8.5	9.0	7.5	5.0	6.0
30	---	---	---	2.5	2.5	2.5	9.5	8.0	8.5	7.5	5.0	6.0
31	---	---	---	2.5	2.5	2.5	---	---	---	7.5	5.0	6.0
MONTH	4.5	1.0	2.5	10.5	.0	3.0	10.5	2.5	5.0	15.5	4.5	9.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.5	5.0	6.0	9.0	5.5	7.0	10.5	8.5	9.5	13.0	11.0	11.5
2	10.0	5.0	6.5	8.0	7.0	7.5	10.0	9.0	9.5	13.0	11.0	11.5
3	9.5	5.5	7.5	9.0	7.0	7.5	11.0	9.0	9.5	12.5	11.0	11.5
4	6.5	5.0	5.5	10.0	7.0	8.0	11.5	9.0	10.0	13.5	11.0	12.0
5	7.0	4.5	6.0	---	---	---	12.0	9.0	10.5	13.0	11.5	12.0
6	7.5	5.0	6.0	---	---	---	11.0	9.0	10.0	13.0	12.0	12.5
7	8.5	5.5	6.0	11.0	7.5	8.5	12.0	9.0	10.0	13.0	12.0	12.0
8	9.0	4.5	6.5	9.5	8.0	8.5	11.0	9.0	9.5	13.5	11.5	12.5
9	6.5	4.5	5.0	10.0	8.0	8.5	11.5	9.0	10.0	13.5	11.5	12.5
10	7.5	5.0	6.0	11.0	8.0	9.0	11.5	9.0	10.0	13.0	12.0	12.5
11	10.0	5.5	7.5	9.5	7.5	8.5	10.5	9.0	9.5	14.0	11.5	12.5
12	8.5	5.5	7.0	10.0	8.0	9.0	12.0	9.5	10.0	13.5	12.5	13.0
13	7.5	5.0	6.0	11.0	8.0	9.0	11.5	9.0	10.0	14.5	13.0	13.5
14	7.5	5.0	6.0	11.0	7.5	9.0	10.5	9.0	9.5	14.0	12.5	13.0
15	8.0	5.0	6.5	10.0	7.5	8.5	10.5	9.5	10.0	13.0	12.5	13.0
16	8.0	5.0	6.0	11.0	8.0	9.0	10.5	9.5	10.0	14.5	12.5	13.5
17	8.0	5.0	6.0	11.0	8.0	9.0	11.0	9.0	10.0	13.5	12.5	13.0
18	8.0	5.0	6.5	10.5	8.0	9.0	11.0	9.5	10.0	14.0	12.5	13.0
19	8.0	5.0	6.0	10.0	8.0	9.0	11.0	9.5	10.0	14.5	13.0	13.5
20	6.0	5.0	5.5	11.0	8.0	9.5	11.5	9.5	10.5	14.5	13.5	14.0
21	7.0	5.5	6.0	11.0	8.5	9.5	11.0	9.5	10.0	15.5	13.5	14.5
22	7.5	5.5	6.5	10.0	8.5	9.0	10.5	10.0	10.0	15.0	13.5	14.0
23	7.5	5.5	6.5	10.0	8.0	9.0	11.0	10.0	10.5	15.0	13.5	14.0
24	7.0	5.5	6.0	10.5	8.0	9.0	11.5	10.0	10.5	15.0	12.5	14.0
25	7.0	6.0	6.5	10.5	8.0	9.0	11.5	10.0	10.5	14.0	13.0	13.5
26	7.0	5.5	6.5	10.0	8.5	9.0	11.5	10.5	10.5	14.5	13.5	14.0
27	7.0	5.5	6.0	11.0	8.5	9.5	11.5	10.5	11.0	15.0	14.0	14.5
28	7.0	5.5	6.0	11.0	8.5	9.5	11.0	10.5	11.0	15.0	13.5	14.0
29	7.5	5.5	6.0	10.0	8.5	9.5	12.0	10.5	11.0	16.0	13.0	14.0
30	7.0	6.0	6.0	11.0	8.5	9.5	12.0	10.5	11.5	15.5	13.5	15.0
31	---	---	---	10.5	8.5	9.5	12.0	11.0	11.5	---	---	---
MONTH	10.0	4.5	6.0	11.0	5.5	9.0	12.0	8.5	10.0	16.0	11.0	13.0

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY

LOCATION.--Lat 42°10'28", long 75°26'25", Broome County, Hydrologic Unit 02040101, on left bank 20 ft (6 m) downstream from culvert on North Sanford Road, 0.2 mi (0.3 km) upstream from outlet of Stilson Pond, 1.5 mi (2.4 km) north of North Sanford, and 4.1 mi (6.6 km) upstream from Dry Brook. Water-quality sampling site at discharge station.

DRAINAGE AREA.--4.71 mi^2 (12.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year.

REVISED RECORDS.--WRD NY 1971: 1970(P), 1970.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,480 ft (451 m), from topographic map.

REMARKS.--Records fair except those for winter periods, which are poor. Some regulation at low flow by dam above station.

AVERAGE DISCHARGE.--11 years, 9.21 ft^3/s (0.261 m^3/s), 26.55 in/yr (674 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 393 ft^3/s (11.1 m^3/s) Mar. 5, 1979, gage height, 3.03 ft (0.924 m) from rating curve extended above 100 ft^3/s (2.83 m^3/s); minimum discharge, 0.08 ft^3/s (0.002 m^3/s) Oct. 2, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 120 ft^3/s (3.4 m^3/s):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Mar. 21	1945	228	6.46	2.44	0.744

Minimum discharge, 0.80 ft^3/s (0.023 m^3/s) June 22, 23, 24, 25, 26, 27, 28; minimum gage height, 0.40 ft (0.122 m) Feb. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	6.2	11	7.2	1.9	1.1	26	16	1.0	2.0	1.2	1.4
2	5.4	7.2	9.7	6.9	1.8	1.1	21	13	1.0	1.8	1.4	1.5
3	6.2	43	8.2	6.2	1.8	1.1	17	11	1.4	1.7	1.4	1.4
4	15	31	7.9	5.6	1.5	1.0	19	8.7	1.2	1.5	1.2	1.4
5	13	20	7.5	5.4	1.5	1.0	21	7.5	1.1	1.7	1.2	1.5
6	22	15	7.2	4.8	1.5	1.0	17	6.9	1.0	2.0	1.2	1.4
7	16	13	6.9	4.6	1.4	1.1	14	6.6	1.4	1.8	1.2	1.4
8	13	12	6.2	4.1	1.2	3.0	12	6.1	1.4	1.7	1.2	1.4
9	16	10	5.6	3.6	1.2	22	24	5.8	1.4	1.5	1.2	1.4
10	16	10	5.4	3.4	1.1	19	49	5.3	1.4	1.4	1.2	1.4
11	11	8.9	4.8	3.0	1.1	14	26	4.8	1.4	1.2	1.2	1.4
12	10	8.2	4.6	3.4	1.1	9.3	19	4.6	1.2	1.1	1.2	1.4
13	10	7.5	4.6	3.2	1.0	7.9	18	4.8	1.1	1.1	1.2	1.4
14	8.9	7.5	4.3	3.4	1.0	7.9	17	5.1	1.0	1.1	1.4	1.4
15	7.9	7.2	4.1	3.6	1.0	7.2	18	4.8	1.0	1.1	1.4	1.4
16	7.2	6.9	3.8	3.8	1.0	6.5	16	4.4	1.1	1.1	1.2	1.2
17	6.9	6.2	3.8	3.8	1.0	6.9	13	4.2	1.0	1.1	1.2	1.5
18	6.5	6.2	3.8	3.6	1.0	58	11	4.0	.90	1.1	1.2	1.5
19	5.9	5.9	3.6	3.6	1.0	36	9.4	3.8	.90	1.1	1.2	1.4
20	5.6	5.4	3.6	3.4	1.0	34	8.4	3.6	.90	1.1	1.2	1.4
21	5.1	5.1	3.4	3.2	1.0	111	7.5	3.4	.90	1.2	1.2	1.2
22	4.8	4.8	3.2	3.2	1.0	94	7.2	3.3	.90	1.1	1.2	1.2
23	4.6	4.8	3.2	3.2	1.0	33	6.6	3.1	.90	1.1	1.2	1.2
24	7.2	4.8	3.8	3.0	1.0	25	6.3	2.6	.80	1.1	1.2	1.2
25	9.3	6.2	6.2	2.8	1.0	33	6.1	2.3	.90	1.1	1.2	1.4
26	9.3	12	8.6	2.6	1.0	21	5.8	2.2	.80	1.1	1.2	1.4
27	8.2	39	10	2.4	1.1	17	5.5	1.8	.80	1.1	1.2	1.4
28	7.5	25	9.7	2.4	1.0	19	7.5	1.5	.80	1.1	1.2	1.2
29	7.2	19	8.9	2.2	1.1	40	20	1.2	1.2	1.4	1.2	1.2
30	6.9	15	8.2	2.1	---	50	21	1.2	1.7	1.2	1.4	1.2
31	6.5	---	7.5	1.9	---	35	---	1.1	---	1.1	1.4	---
TOTAL	282.3	373.0	189.3	115.6	34.3	717.1	469.3	154.7	32.50	40.8	38.4	40.8
MEAN	9.11	12.4	6.11	3.73	1.18	23.1	15.6	4.99	1.08	1.32	1.24	1.36
MAX	22	43	11	7.2	1.9	111	49	16	1.7	2.0	1.4	1.5
MIN	3.2	4.8	3.2	1.9	1.0	1.0	5.5	1.1	.80	1.1	1.2	1.2
CFSM	1.93	2.63	1.30	.79	.25	4.90	3.31	1.06	.23	.28	.26	.29
IN.	2.23	2.95	1.49	.91	.27	5.66	3.71	1.22	.26	.32	.30	.32

CAL YR 1979 TOTAL 4040.60 MEAN 11.1 MAX 237 MIN .81 CFSM 2.36 IN 31.91
WTR YR 1980 TOTAL 2488.10 MEAN 6.80 MAX 111 MIN .80 CFSM 1.44 IN 19.65

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971 (c), 1972 (a), 1973-74 (c), 1975 (d), 1976-80 (c).
NUTRIENT DATA: 1971, 1974 (c); 1975 (b); 1976-80 (c).
BIOLOGICAL DATA: 1974 (a), 1975-80 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1970 to current year.

INSTRUMENTATION.--Temperature recorder since October 1970. Strip Chart recorder discontinued May 13 and digital recorded started May 15.

REMARKS.--No temperature record May 13-14. Change over in equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1971-75, 1977-80), 21.0°C June 30, July 1, 1971, July 23, 24, 1972; minimum (except water year 1979), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 18.5°C Sept. 1, 2, 21, 22; minimum, freezing point on many days during February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 09...	1645	18	61	6.6	12.0	2.0	10.7	101	K23	31	15
MAR 25...	1030	34	49	6.1	2.5	2.5	14.0	102	K32	K28	14
APR 09...	1400	31	43	6.2	5.5	.50	13.0	107	K1	K1	13
MAY 21...	1100	3.5	55	6.5	9.5	.02	11.2	102	K17	K9	18
JUN 03...	0900	1.4	64	6.4	13.5	.80	10.2	102	K26	K32	23
JUL 07...	2100	1.9	74	6.5	14.0	3.1	9.0	97	26	K15	25
AUG 18...	1300	1.2	81	6.3	15.5	2.8	9.3	96	K17	43	30
SEP 08...	1700	1.4	75	7.1	16.5	1.8	9.8	104	22	36	31

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 09...	7	4.4	1.0	1.6	.3	8	7.3	1.6	.0	3.0	28
MAR 25...	8	4.1	1.0	2.1	.7	6	7.9	2.7	.1	3.0	32
APR 09...	0	3.6	1.0	1.8	.5	13	8.3	2.3	.0	2.8	32
MAY 21...	3	4.9	1.3	2.2	.5	15	8.6	2.5	.1	3.0	33
JUN 03...	7	6.6	1.5	2.1	.5	16	8.3	2.3	.1	3.0	56
JUL 07...	8	7.4	1.6	2.0	.7	17	7.1	2.4	.1	2.8	51
AUG 18...	3	8.7	1.9	2.4	.7	27	5.9	2.6	.1	3.4	59
SEP 08...	3	9.0	2.0	2.6	.9	28	5.6	2.8	.1	3.6	49

K Results based on colony count outside the acceptable range (non-ideal colony count).

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 09...	24	3	--	--	--	--	--	--	--	--	.00
MAR 25...	25	30	.29	.000	.29	.020	.00	.00	.29	.020	.00
APR 09...	31	6	.25	.000	.25	.040	.14	.18	.43	.040	.00
MAY 21...	32	0	.15	.010	.16	.060	.03	.09	.25	.020	.00
JUN 03...	34	6	.19	.000	.19	.010	.40	.41	.60	.030	.00
JUL 07...	34	6	.26	.010	.27	.020	.16	.18	.45	.010	.00
AUG 18...	42	2	.37	.000	.37	.010	.05	.06	.43	.040	.00
SEP 08...	43	2	.44	.010	.45	.020	.13	.15	.60	.000	.00

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.0	13.0		8.0	8.0		6.0	5.5		2.0	1.5	
2	13.5	13.0		8.0	8.0		5.5	5.0		1.5	1.5	
3	13.5	13.5		8.0	8.0		5.0	5.0		1.5	1.5	
4	14.0	13.5		8.0	8.0		5.0	5.0		1.5	1.5	
5	14.0	14.0		8.0	8.0		5.0	5.0		1.5	1.5	
6	14.0	13.5		8.0	8.0		5.0	5.0		1.5	1.5	
7	13.5	13.5		8.0	7.0		5.0	5.0		1.5	1.5	
8	13.5	12.0		7.0	7.0		5.0	4.5		1.5	1.5	
9	12.0	12.0		7.0	7.0		4.5	4.0		2.0	1.5	
10	12.0	11.5		7.0	7.0		4.0	4.0		2.0	2.0	
11	11.5	11.0		7.0	7.0		4.0	4.0		3.0	2.0	
12	11.0	11.0		7.0	6.5		4.0	3.5		3.0	2.0	
13	11.0	10.5		6.5	6.5		3.5	3.0		2.0	2.0	
14	10.5	10.0		6.5	6.5		3.0	2.0		3.0	2.0	
15	10.0	10.0		6.5	6.0		2.0	2.0		3.0	3.0	
16	10.0	9.5		6.0	5.5		2.0	2.0		3.0	2.0	
17	9.5	9.5		5.5	5.5		2.0	1.5		2.0	2.0	
18	9.5	9.5		5.5	5.5		1.5	1.0		2.0	2.0	
19	9.5	9.5		5.5	5.5		1.0	1.0		2.0	2.0	
20	9.5	9.5		5.5	5.5		1.5	1.0		2.0	2.0	
21	9.5	9.5		5.5	5.5		1.5	1.5		2.0	2.0	
22	10.0	9.5		5.5	5.5		1.5	1.5		2.0	2.0	
23	10.0	10.0		6.0	5.5		2.0	1.5		2.0	2.0	
24	10.0	9.5		6.5	6.0		2.0	1.5		2.0	1.5	
25	9.5	9.5		6.5	6.5		1.5	1.5		1.5	1.0	
26	9.5	9.5		6.5	6.5		2.0	1.5		1.0	1.0	
27	9.5	9.0		6.5	6.5		2.0	2.0		1.5	1.0	
28	9.0	8.5		6.5	6.5		2.0	2.0		1.5	1.5	
29	8.5	8.5		6.5	6.0		2.0	1.5		1.5	1.0	
30	8.5	8.0		6.0	6.0		1.5	1.5		1.0	1.0	
31	8.0	8.0		---	---		1.5	1.5		1.0	1.0	
MONTH	14.0	8.0		8.0	5.5		6.0	1.0		3.0	1.0	

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	1.0		2.0	1.0		3.5	3.5		8.0	7.0	---
2	1.0	1.0		2.0	1.0		3.5	3.5		8.0	8.0	---
3	1.0	1.0		1.0	1.0		3.5	3.5		8.0	7.0	---
4	1.0	.5		1.0	1.0		3.5	3.5		7.0	6.5	---
5	.5	.5		1.0	1.0		4.0	3.5		6.5	6.5	---
6	1.0	.5		1.0	1.0		4.0	4.0		6.5	6.5	---
7	.5	.5		1.5	1.0		4.0	4.0		6.5	6.5	---
8	.5	.5		1.5	1.0		4.5	4.0		6.5	6.0	---
9	.5	.5		3.0	1.5		4.5	4.5		6.0	6.0	---
10	.5	.5		3.0	3.0		4.5	4.5		6.5	6.0	---
11	1.0	.5		3.0	3.0		4.5	4.5		6.5	6.5	---
12	.5	.5		3.0	3.0		5.0	4.5		7.0	6.5	---
13	.5	.5		3.0	3.0		5.5	5.0		---	---	---
14	.5	.0		3.0	3.0		5.5	5.5		---	---	---
15	.0	.0		3.5	3.0		5.5	5.5		9.5	8.5	9.0
16	.0	.0		3.5	3.0		5.5	5.5		11.5	8.0	9.5
17	1.0	.0		3.5	3.0		5.5	5.5		11.5	8.5	10.0
18	1.5	.0		3.5	3.0		5.5	5.5		10.0	9.5	10.0
19	1.0	.0		3.0	3.0		5.5	5.5		11.0	10.0	10.5
20	.0	.0		3.0	3.0		6.0	5.5		11.5	9.5	10.5
21	.5	.0		3.0	3.0		6.0	6.0		12.0	10.0	10.5
22	.5	.0		3.0	2.0		6.0	5.5		12.5	9.5	11.0
23	.5	.0		2.0	2.0		5.5	5.5		13.0	10.0	11.0
24	1.0	.5		3.0	2.0		5.5	5.5		13.0	10.0	11.5
25	.5	.0		3.0	3.0		5.5	5.5		13.0	10.0	11.5
26	.5	.0		3.5	3.5		5.5	5.5		12.5	8.5	10.0
27	1.5	.5		3.5	3.5		5.5	5.5		12.5	8.0	10.0
28	1.0	1.0		3.5	3.5		5.5	5.5		13.0	8.5	10.5
29	3.0	1.0		3.5	3.5		6.5	5.5		13.5	9.0	11.0
30	---	---		3.5	3.5		7.0	6.5		14.0	10.5	12.0
31	---	---		3.5	3.5		---	---		14.0	11.0	12.5
MONTH	3.0	.0		3.5	1.0		7.0	3.5		14.0	6.0	10.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.5	11.0	12.5	14.5	12.5	13.0	17.0	14.5	15.5	18.5	16.0	17.0
2	14.0	11.5	12.5	14.0	12.5	13.0	16.5	14.0	15.0	18.5	16.5	17.5
3	14.0	11.5	12.5	14.5	12.5	13.5	16.5	15.0	15.5	16.5	15.0	16.0
4	12.0	11.0	11.5	16.0	12.5	14.0	17.0	14.0	15.5	17.5	14.5	15.5
5	13.5	9.5	11.0	15.5	13.0	14.0	18.0	14.5	16.0	17.5	16.0	16.5
6	13.5	9.0	11.0	14.5	12.5	13.5	17.5	15.0	16.0	17.5	15.0	16.0
7	12.0	11.5	11.5	15.0	11.0	13.0	17.5	14.5	16.0	16.5	14.5	15.5
8	12.0	9.0	11.0	14.5	12.5	13.5	18.0	15.0	16.5	16.0	13.5	15.0
9	10.5	8.5	9.0	15.5	13.0	14.0	18.0	15.5	16.5	16.5	13.0	15.0
10	11.0	9.0	9.5	15.5	12.0	14.0	16.0	14.0	15.0	16.0	13.5	15.0
11	11.0	8.5	9.5	16.5	12.5	14.5	16.5	15.0	15.5	16.5	12.5	14.5
12	13.0	9.0	10.5	15.5	12.0	14.0	17.5	15.0	16.0	16.5	14.0	15.0
13	14.0	9.0	11.5	15.5	11.5	13.5	17.0	15.0	15.5	17.5	15.0	16.0
14	15.0	10.0	12.0	16.5	11.5	14.0	16.0	14.0	15.0	17.0	16.5	16.5
15	14.5	11.5	13.0	16.0	13.0	14.0	17.0	15.5	16.0	16.5	14.0	15.0
16	13.5	11.0	12.0	17.0	14.0	15.5	15.5	14.0	14.5	15.5	13.5	14.5
17	14.0	9.0	11.5	17.5	14.0	15.5	16.0	13.0	14.5	16.5	15.0	15.5
18	14.0	9.5	11.5	17.0	13.0	15.0	15.5	14.0	14.5	15.5	13.5	15.0
19	14.0	10.5	12.0	16.5	13.0	15.0	16.5	15.0	15.5	16.0	12.5	14.0
20	12.5	11.0	11.5	17.5	14.5	16.0	17.0	14.5	15.5	16.5	13.5	15.5
21	14.5	11.0	12.0	18.0	15.0	16.0	16.0	14.0	15.0	18.5	16.5	17.0
22	14.5	10.0	12.0	16.5	14.5	15.5	16.0	14.0	15.0	18.5	16.5	17.5
23	15.0	10.5	12.5	16.0	14.0	15.0	17.5	15.0	16.0	17.0	14.0	16.0
24	16.0	12.0	13.5	16.5	13.5	15.0	17.5	14.5	16.0	15.0	13.0	14.0
25	16.0	12.5	14.0	16.5	12.0	14.5	17.5	14.5	16.0	14.5	13.0	14.0
26	16.0	12.5	14.0	16.5	13.0	15.0	17.0	14.5	16.0	14.5	12.0	13.5
27	16.5	12.5	14.0	16.5	13.5	15.0	18.0	15.0	16.5	12.5	11.5	12.0
28	13.5	12.0	12.5	16.5	15.0	15.5	17.0	15.5	16.0	13.5	10.5	12.0
29	14.5	12.0	13.0	16.5	15.0	15.5	18.0	15.5	16.5	13.0	10.0	12.0
30	13.5	12.5	13.0	16.5	14.5	15.5	18.0	16.0	16.5	15.0	13.0	13.5
31	---	---	---	16.5	13.0	15.0	18.0	16.0	17.0	---	---	---
MONTH	16.5	8.5	12.0	18.0	11.0	14.5	18.0	13.0	15.5	18.5	10.0	15.0

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY

LOCATION.--42°00'11", long 75°23'02", Delaware County, Hydrologic Unit 02040101, on left bank at downstream side of bridge on County Highway 56 in Hale Eddy, and 9 mi (14 km) upstream from confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--593 mi^2 (1,536 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1912 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 871: 1916.

GAGE.--Water-stage recorder. Datum of gage is 946.46 ft (288.481 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 8, 1928, nonrecording gage.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft^3/s (818 m^3/s) Mar. 22, 1948, gage height, 15.69 ft (4,782 m); maximum gage height, 15.8 ft (4.82 m) Sept. 30, 1924, from graph based on gage readings; minimum discharge, 17 ft^3/s (0.48 m^3/s) Oct. 20, 1963; minimum gage height, 1.03 ft (0.314 m) Aug. 4, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 20.3 ft (6.19 m), from floodmarks, discharge, about 46,000 ft^3/s (1,300 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,620 ft^3/s (159 m^3/s) Mar. 21, gage height, 7.77 ft (2.368 m); minimum, 69 ft^3/s (1.95 m^3/s) Feb. 23, 24, gage height, 1.38 ft (0.421 m); minimum daily, 86 ft^3/s (2.44 m^3/s) Feb. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	346	155	1160	192	500	603	3590	2040	551	382	961	743
2	259	273	1300	181	740	592	3180	1900	488	358	1130	702
3	294	1250	1300	162	700	608	2770	1740	150	350	657	941
4	350	786	1220	150	680	497	2610	1530	390	342	374	842
5	283	541	927	140	640	297	2700	1350	592	350	338	1280
6	521	424	646	140	600	362	2510	1190	663	398	374	1280
7	346	370	469	130	507	469	2230	1070	512	358	334	914
8	315	330	455	130	738	561	2000	955	129	346	691	874
9	382	280	507	120	652	521	2390	855	398	338	761	849
10	354	280	541	170	497	287	3470	761	446	334	536	823
11	287	246	551	280	442	246	3290	702	120	652	312	817
12	259	218	546	230	488	160	2910	630	109	697	366	1050
13	256	198	566	190	420	130	2680	420	635	390	507	1110
14	218	192	561	170	420	120	2470	394	842	323	483	556
15	198	181	526	150	561	400	2480	276	451	323	1080	433
16	186	181	502	140	624	250	2460	203	546	338	948	516
17	168	162	497	130	451	200	2250	152	483	323	668	474
18	155	165	446	120	400	1310	2030	140	561	630	641	536
19	143	155	420	120	330	720	1820	140	571	726	619	941
20	133	145	411	110	260	720	1630	131	934	398	786	1060
21	127	138	378	110	577	2470	1460	129	1090	319	792	516
22	120	138	250	100	323	2700	1310	124	755	323	1100	312
23	116	140	178	100	86	1100	1160	114	855	319	1210	350
24	370	138	198	200	131	811	1060	105	968	416	1010	366
25	290	253	374	450	184	1110	948	99	975	934	1000	319
26	249	366	378	350	497	714	868	92	881	927	1000	881
27	221	914	342	250	521	817	829	122	1090	652	1070	1040
28	221	635	301	200	708	1470	927	150	1250	378	1090	531
29	206	492	263	210	768	2300	1640	420	804	497	1330	429
30	186	691	243	270	---	3470	2070	474	668	685	1270	941
31	165	---	215	350	---	3740	---	455	---	566	1100	---
TOTAL	7724	10437	16671	5745	14445	29755	63742	18863	18907	14372	24538	22426
MEAN	249	348	538	185	498	960	2125	608	630	464	792	748
MAX	521	1250	1300	450	768	3740	3590	2040	1250	934	1330	1280
MIN	116	138	178	100	86	120	829	92	109	319	312	312

CAL YR 1979 TOTAL 329131 MEAN 902 MAX 14100 MIN 60
WTR YR 1980 TOTAL 247625 MEAN 677 MAX 3740 MIN 86

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.
CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1971-74 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
NUTRIENT DATA: 1971-74 (d), 1975 (c).
BIOLOGICAL DATA:
Bacteria--1971, 1973 (c); 1974 (d); 1975 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no winter record, except water years 1968 and 1978-80).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. No record Nov. 16 to Dec. 13, Dec. 15 to Jan. 29, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-77, 1979-80), 30.5°C July 22, 23, 1972; minimum (water years 1968, 1978-80), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 25.0°C May 25; minimum recorded, freezing point on several days during February and March.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.0	10.0	11.0	10.0	6.5	8.5	---	---	---	---	---	---
2	15.0	11.5	13.5	10.0	9.5	10.0	---	---	---	---	---	---
3	15.5	14.0	14.5	9.5	7.0	8.5	---	---	---	---	---	---
4	15.5	13.5	14.5	7.5	5.5	6.5	---	---	---	---	---	---
5	14.5	13.5	14.0	8.0	5.5	7.0	---	---	---	---	---	---
6	14.5	11.5	13.0	7.0	5.0	6.0	---	---	---	---	---	---
7	12.0	10.5	11.0	7.5	7.0	7.0	---	---	---	---	---	---
8	12.0	8.5	10.0	7.0	6.0	6.5	---	---	---	---	---	---
9	10.0	9.0	9.5	7.5	5.5	6.5	---	---	---	---	---	---
10	9.0	7.5	8.0	9.5	7.5	8.5	---	---	---	---	---	---
11	9.0	7.0	7.5	8.0	7.0	7.5	---	---	---	---	---	---
12	8.5	7.0	7.5	7.0	6.0	6.5	---	---	---	---	---	---
13	10.5	8.0	9.0	7.0	5.5	6.5	---	---	---	---	---	---
14	9.0	7.5	8.0	7.0	5.0	6.0	5.0	3.5	4.0	---	---	---
15	8.0	6.5	7.0	5.0	3.5	4.5	---	---	---	---	---	---
16	10.0	6.5	8.0	---	---	---	---	---	---	---	---	---
17	10.0	7.5	9.0	---	---	---	---	---	---	---	---	---
18	12.5	9.5	11.0	---	---	---	---	---	---	---	---	---
19	14.5	10.0	12.0	---	---	---	---	---	---	---	---	---
20	16.0	11.5	13.5	---	---	---	---	---	---	---	---	---
21	18.0	13.0	15.0	---	---	---	---	---	---	---	---	---
22	18.5	14.5	16.5	---	---	---	---	---	---	---	---	---
23	17.0	14.0	15.5	---	---	---	---	---	---	---	---	---
24	14.0	10.0	11.5	---	---	---	---	---	---	---	---	---
25	9.5	8.0	9.0	---	---	---	---	---	---	---	---	---
26	7.5	6.0	7.0	---	---	---	---	---	---	---	---	---
27	6.0	5.5	5.5	---	---	---	---	---	---	---	---	---
28	6.0	4.5	5.0	---	---	---	---	---	---	---	---	---
29	7.0	6.0	6.5	---	---	---	---	---	---	---	---	---
30	7.0	6.0	6.5	---	---	---	---	---	---	5.0	4.5	4.5
31	9.5	5.0	7.0				---	---	---	4.5	4.0	4.5
MONTH	18.5	4.5	10.0									

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.5	4.0	4.5	4.5	.0	1.0	5.5	2.0	3.5	12.5	9.5	11.0
2	4.5	4.0	4.5	4.0	.0	1.5	4.0	2.0	3.0	12.5	10.0	11.0
3	4.5	4.0	4.5	5.5	.0	2.5	6.0	2.0	4.0	14.0	9.5	11.0
4	7.0	4.5	5.5	7.0	.5	3.5	5.5	3.0	4.0	13.5	9.0	11.5
5	8.0	4.5	6.0	3.5	2.0	3.0	5.5	2.5	3.5	14.5	8.0	11.5
6	8.5	4.0	6.0	6.5	1.0	3.5	6.5	2.5	4.0	13.0	9.0	11.0
7	9.0	5.5	7.0	7.0	2.0	4.5	6.5	2.5	4.5	12.0	8.5	10.5
8	10.5	4.5	7.0	5.5	1.0	3.0	6.5	4.0	5.0	11.0	7.5	9.5
9	10.5	5.0	7.5	5.0	.5	2.0	7.0	5.0	6.0	11.0	8.0	9.5
10	10.0	5.0	7.0	3.5	.5	2.0	6.5	4.5	5.5	14.5	7.5	10.5
11	8.5	4.0	6.5	3.0	.5	1.5	6.0	4.5	5.0	12.0	9.5	10.5
12	8.0	5.0	6.5	2.5	.5	1.0	6.0	4.5	5.0	13.0	10.5	11.5
13	10.0	3.5	6.0	1.0	.5	1.0	7.0	4.5	5.5	15.5	12.0	13.5
14	10.0	4.5	7.0	.5	.0	.5	5.0	4.5	4.5	13.5	12.0	13.0
15	10.0	5.0	7.5	.5	.0	.5	6.0	4.5	5.5	14.0	10.5	12.0
16	7.0	4.5	5.5	1.5	.0	.5	4.5	3.5	4.5	18.5	9.0	14.0
17	6.5	3.0	4.5	3.0	.5	2.0	7.0	3.5	5.0	20.5	11.0	16.0
18	10.5	3.0	6.0	3.0	.5	1.5	6.5	4.0	5.0	15.5	13.0	14.0
19	11.0	3.0	6.5	6.5	.0	2.5	8.5	4.0	6.0	16.0	13.0	14.5
20	14.0	3.5	9.0	7.5	1.0	3.5	7.0	4.5	5.5	19.0	13.0	16.0
21	10.5	8.5	9.0	4.0	1.5	3.0	10.0	5.5	7.0	19.0	15.0	16.5
22	8.5	6.0	6.5	2.5	.5	1.5	9.5	5.5	7.0	22.5	14.0	17.5
23	9.0	6.0	7.5	3.5	.5	2.0	11.0	5.0	8.0	24.0	15.5	19.5
24	10.0	6.5	8.0	6.0	2.0	3.5	12.0	7.5	9.5	24.5	17.0	20.5
25	13.5	4.0	8.5	3.0	1.5	2.0	10.0	8.0	9.0	25.0	17.0	20.5
26	8.5	4.0	6.0	3.0	1.5	2.0	12.0	7.5	10.0	22.0	13.5	17.5
27	3.5	.5	2.5	6.5	1.0	3.5	10.0	9.5	9.5	19.5	12.0	15.5
28	4.0	.5	2.0	6.0	2.0	4.0	9.5	9.0	9.5	20.0	12.0	15.5
29	2.5	.0	1.0	3.5	3.0	3.0	9.5	9.0	9.5	16.0	8.0	12.5
30	---	---	---	3.5	2.5	3.0	11.5	9.0	10.0	15.0	7.5	10.5
31	---	---	---	3.5	2.5	3.0	---	---	---	13.5	8.5	11.0
MONTH	14.0	.0	6.0	7.5	.0	2.5	12.0	2.0	6.0	25.0	7.5	13.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.5	7.0	10.5	17.0	9.0	13.0	13.5	9.0	11.0	15.0	10.0	12.0
2	12.5	7.0	9.5	13.5	10.0	11.0	12.5	9.0	10.5	15.0	10.0	12.0
3	20.0	12.5	15.5	14.5	9.5	12.0	16.0	9.5	12.5	15.0	10.5	11.5
4	14.0	9.0	11.0	19.0	9.5	14.0	19.5	12.5	15.5	12.5	10.5	11.5
5	14.0	6.0	9.0	15.5	10.0	13.0	20.0	12.0	16.0	14.0	11.0	12.5
6	12.5	6.0	9.0	18.5	11.0	14.5	17.5	14.0	15.5	15.0	12.0	13.0
7	10.5	7.5	8.5	18.0	9.0	13.5	18.5	11.0	14.5	16.5	12.0	13.5
8	14.0	10.0	12.0	15.0	10.0	12.5	15.5	9.5	12.0	16.5	12.0	14.0
9	9.0	5.5	7.0	16.5	10.0	13.0	17.0	9.5	12.5	16.5	12.0	14.0
10	11.5	6.0	8.5	18.0	10.0	13.5	15.0	9.5	12.0	15.5	11.5	13.0
11	15.0	7.5	11.0	13.5	9.0	11.0	15.0	12.0	13.5	16.0	12.0	12.5
12	22.0	10.0	15.5	15.5	8.0	11.0	16.0	11.0	13.5	16.0	11.5	13.5
13	14.5	6.5	10.0	18.5	8.0	12.5	17.5	10.5	12.5	16.0	12.0	13.5
14	13.5	6.0	9.0	19.0	10.0	14.5	17.0	11.5	14.5	15.5	12.0	13.0
15	16.0	6.5	11.0	14.5	10.0	13.0	14.0	10.5	11.5	17.0	12.0	13.5
16	14.0	7.5	11.0	17.5	10.0	14.0	14.0	10.0	11.5	16.5	12.5	14.5
17	15.0	6.5	10.5	19.0	11.0	14.5	14.0	10.0	12.0	16.0	13.5	14.5
18	15.0	6.0	10.0	15.5	9.0	12.0	12.0	9.5	10.5	14.5	12.5	13.5
19	13.0	6.5	9.5	14.5	8.0	10.5	13.0	9.5	11.0	16.0	13.0	14.5
20	11.0	6.5	8.0	18.5	9.0	13.5	16.0	9.5	13.5	16.0	13.5	14.5
21	12.0	6.5	8.5	19.0	11.5	15.0	13.5	10.0	11.0	16.5	12.0	14.0
22	13.5	6.0	9.0	16.0	11.5	14.0	13.5	10.5	12.0	16.5	13.0	14.5
23	12.0	6.5	9.0	15.5	11.0	13.0	13.5	10.5	12.0	20.0	15.0	17.5
24	12.5	6.5	8.5	17.0	10.0	13.0	12.5	10.0	11.0	19.0	13.0	16.5
25	12.0	6.5	8.5	14.5	8.0	10.5	15.5	10.5	13.0	18.0	12.5	14.5
26	12.5	6.5	9.0	13.5	8.5	10.5	14.5	10.0	12.0	15.5	13.0	14.0
27	12.5	6.5	9.0	15.5	8.5	11.5	12.5	9.5	10.5	16.0	13.0	14.0
28	9.0	6.5	7.5	16.5	9.5	13.0	13.0	10.5	11.5	16.5	13.0	14.5
29	11.0	7.0	8.5	15.0	9.5	13.0	14.0	10.5	12.0	17.0	12.0	14.0
30	12.0	8.5	10.0	16.5	9.5	12.5	12.5	10.0	10.5	17.5	13.5	15.0
31	---	---	---	15.0	11.0	13.0	15.0	10.0	12.5	---	---	---
MONTH	22.0	5.5	10.0	19.0	8.0	13.0	20.0	9.0	12.5	20.0	10.0	14.0

01427207 DELAWARE RIVER AT LORDVILLE, NY

LOCATION.--Lat 41°52'05", long 75°12'50", Delaware County, Hydrologic Unit 02040101, at Lordville-Equinunk Interstate Bridge at Lordville, 50 ft (15 m) downstream from Humphries Brook, and 6.5 mi (10.4 km) southeast of Hancock.

DRAINAGE AREA.--1,587 mi² (4,110 km²).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to August 1971, June 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record Dec. 12 to Jan. 15 recorder removed, May 30 to July 8 due to instrument damage.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-70, 73, 1975-80) 30.5°C June 16, 1976; minimum (water years 1968-71, 74, 77, 78, 80), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 27.0°C July 21, minimum freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	14.5	14.5	8.5	6.5	7.5	4.0	3.0	3.5	---	---	---
2	15.5	14.5	15.0	9.5	8.5	9.0	4.0	3.0	3.5	---	---	---
3	16.0	15.5	15.5	9.5	8.0	9.0	3.5	2.5	3.0	---	---	---
4	16.0	15.0	15.5	7.5	6.5	7.0	4.0	3.0	3.5	---	---	---
5	15.5	15.0	15.0	7.5	6.0	6.5	4.0	3.5	3.5	---	---	---
6	15.0	13.5	14.0	6.5	6.0	6.5	4.0	3.0	3.5	---	---	---
7	13.5	12.0	12.5	7.0	6.5	6.5	5.0	4.5	4.5	---	---	---
8	11.5	10.5	11.0	6.5	6.0	6.5	4.5	3.0	4.0	---	---	---
9	10.5	10.0	10.5	7.0	6.0	6.5	2.5	1.0	1.5	---	---	---
10	9.5	9.0	9.0	8.0	7.0	7.5	3.0	1.5	2.0	---	---	---
11	9.0	8.0	8.5	8.0	7.5	8.0	4.5	3.0	3.5	---	---	---
12	8.5	8.5	8.5	7.5	6.5	7.0	---	---	---	---	---	---
13	10.0	8.5	9.0	6.5	6.5	6.5	---	---	---	---	---	---
14	9.5	8.5	9.0	6.5	6.0	6.5	---	---	---	---	---	---
15	8.5	7.5	8.0	5.5	5.0	5.0	---	---	---	---	---	---
16	9.0	7.0	8.0	5.0	3.5	4.5	---	---	---	.5	.0	.0
17	9.5	8.5	9.0	4.0	2.0	3.0	---	---	---	.5	.0	.0
18	11.5	9.5	10.5	4.5	3.5	4.0	---	---	---	.5	.0	.5
19	12.5	10.5	11.5	6.0	4.5	5.0	---	---	---	.5	.0	.0
20	14.0	12.0	13.0	6.5	5.5	6.0	---	---	---	.5	.0	.5
21	15.5	13.0	14.5	7.0	6.0	6.5	---	---	---	.5	.0	.0
22	17.0	15.0	15.5	7.5	7.0	7.5	---	---	---	.0	.0	.0
23	16.5	15.0	16.0	9.0	7.5	8.0	---	---	---	.0	.0	.0
24	15.5	12.0	14.0	10.0	8.5	9.5	---	---	---	.5	.0	.0
25	12.0	9.5	10.5	11.0	10.0	10.5	---	---	---	.5	.0	.0
26	9.5	7.5	8.0	12.5	11.0	11.5	---	---	---	.5	.0	.0
27	7.5	6.0	6.5	11.5	8.5	10.0	---	---	---	.5	.0	.0
28	6.0	5.0	5.5	8.5	7.0	7.5	---	---	---	.5	.0	.0
29	6.5	5.5	6.0	7.0	5.5	6.0	---	---	---	.0	.0	.0
30	7.0	6.5	6.5	5.0	3.5	4.0	---	---	---	.0	.0	.0
31	7.5	5.5	6.5	---	---	---	---	---	---	.0	.0	.0
MONTH	17.0	5.0	11.0	12.5	2.0	7.0						

01427207 DELAWARE RIVER AT LORDVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	.0	.0	.0	.0	.0	.0	6.0	3.5	4.5	12.5	10.5	11.5
2	.0	.0	.0	.0	.0	.0	5.5	4.0	4.5	13.0	11.5	12.0
3	.0	.0	.0	.0	.0	.0	7.0	3.5	5.0	14.5	11.0	13.0
4	.0	.0	.0	.0	.0	.0	6.5	5.0	6.0	14.5	11.5	13.0
5	.0	.0	.0	.0	.0	.0	6.0	4.5	5.5	14.5	11.5	13.0
6	.0	.0	.0	.5	.0	.0	7.5	4.5	6.0	14.0	12.5	13.5
7	.0	.0	.0	.0	.0	.0	8.0	5.0	7.0	13.5	12.0	13.0
8	.0	.0	.0	.5	.0	.5	8.0	6.5	7.0	12.5	11.0	11.5
9	.0	.0	.0	.5	.0	.0	8.0	7.5	8.0	11.5	10.5	11.0
10	.0	.0	.0	.5	.5	.5	8.0	6.5	7.5	13.0	9.5	11.5
11	.0	.0	.0	.5	.5	.5	8.5	6.5	7.5	12.5	11.5	12.0
12	.0	.0	.0	.5	.5	.5	7.5	6.5	7.0	12.5	11.0	12.0
13	.0	.0	.0	.5	.5	.5	9.0	7.0	8.0	15.0	12.5	13.5
14	.0	.0	.0	.5	.5	.5	8.0	6.0	6.5	15.0	13.5	14.5
15	.0	.0	.0	.5	.5	.5	8.0	6.0	7.5	14.0	12.5	13.5
16	.0	.0	.0	.5	.5	.5	7.5	5.0	6.0	16.0	11.5	14.0
17	.0	.0	.0	.5	.5	.5	7.0	4.0	5.5	17.5	13.5	15.5
18	.0	.0	.0	1.0	.5	.5	7.0	5.5	6.5	16.5	14.0	15.0
19	.0	.0	.0	2.0	.5	1.0	9.0	5.5	7.5	16.5	14.0	15.0
20	.0	.0	.0	3.0	1.0	1.5	9.0	7.0	8.0	17.5	15.0	16.5
21	.0	.0	.0	3.0	1.5	2.5	10.5	7.5	9.0	17.5	16.5	17.0
22	.0	.0	.0	2.0	1.5	1.5	10.5	7.5	9.5	16.0	15.5	16.0
23	.0	.0	.0	3.0	2.0	2.5	11.5	8.0	9.5	20.5	17.0	19.0
24	.0	.0	.0	4.5	3.0	4.0	13.0	10.0	11.5	22.0	19.0	20.5
25	.0	.0	.0	4.0	3.0	3.5	12.5	10.5	11.5	22.5	20.0	21.0
26	.0	.0	.0	3.0	2.5	3.0	12.0	10.0	11.0	20.0	18.0	19.0
27	.0	.0	.0	5.5	2.5	4.0	11.5	10.0	11.0	19.5	16.0	17.5
28	.0	.0	.0	5.5	3.5	4.5	10.0	9.0	9.5	19.5	16.0	17.5
29	.0	.0	.0	5.5	4.0	4.5	9.5	9.0	9.0	21.5	17.5	19.0
30	---	---	---	4.5	4.0	4.0	11.5	9.0	10.0	---	---	---
31	---	---	---	4.5	3.5	4.0	---	---	---	---	---	---
MONTH	.0	.0	.0	5.5	.0	1.5	13.0	3.5	8.0	22.5	9.5	15.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1				---	---	---	22.5	18.5	20.0	19.5	18.0	18.5
2				---	---	---	18.0	16.0	17.0	22.0	19.0	20.5
3				---	---	---	18.0	15.5	16.5	21.0	18.5	19.5
4				---	---	---	23.5	18.0	20.5	20.0	17.0	18.5
5				---	---	---	25.0	22.0	23.5	19.0	16.0	17.5
6				---	---	---	25.0	23.0	24.0	18.0	16.0	17.0
7				---	---	---	26.0	22.5	24.0	18.5	16.0	17.5
8				---	---	---	26.0	23.5	24.5	18.0	16.0	17.0
9				23.0	20.5	21.5	23.0	20.0	21.5	17.0	15.5	16.5
10				24.5	21.0	22.5	21.5	19.0	20.0	18.5	16.5	17.0
11				24.0	22.0	23.0	22.0	19.5	20.5	18.0	15.0	16.5
12				21.5	17.5	19.5	22.5	21.0	21.5	17.5	16.0	16.5
13				22.5	18.0	20.0	22.0	20.0	21.0	17.0	15.5	16.0
14				24.5	19.5	22.0	20.0	18.5	19.5	17.5	17.0	17.5
15				24.0	22.0	23.0	19.5	17.0	18.5	17.5	16.0	17.0
16				25.0	22.0	23.5	17.0	14.5	15.5	16.0	14.5	15.5
17				25.5	22.5	24.0	18.5	14.0	16.0	16.5	15.0	15.5
18				26.5	23.0	24.5	18.5	17.0	17.5	16.5	15.5	16.0
19				24.5	19.5	21.0	18.0	16.0	17.0	17.0	14.5	15.5
20				23.0	19.0	21.0	18.5	17.0	18.0	16.5	15.0	16.0
21				27.0	22.5	24.0	19.5	17.0	18.0	19.0	16.5	17.5
22				25.5	24.0	24.5	17.5	15.5	16.5	21.0	18.5	19.5
23				24.5	22.5	23.5	17.0	14.5	16.0	21.0	19.0	20.0
24				24.0	21.0	22.5	17.5	15.5	16.5	19.0	16.0	17.5
25				22.5	20.0	21.5	18.0	16.5	17.0	16.5	15.0	16.0
26				19.5	16.5	18.0	19.0	16.5	17.5	14.5	13.0	13.5
27				20.0	17.0	18.5	18.5	16.5	17.5	13.5	11.5	12.5
28				21.5	19.0	20.0	18.0	15.5	16.5	14.0	12.0	13.0
29				22.0	20.0	21.0	16.5	15.0	15.5	14.5	12.0	13.0
30				21.5	17.5	19.0	17.5	16.0	16.5	15.5	13.5	14.5
31				23.5	19.0	21.0	18.0	15.5	16.5	---	---	---
MONTH				27.0	16.5	21.5	26.0	14.0	18.5	22.0	11.5	16.5

01427500 CALLICOON CREEK AT CALLICON, NY

LOCATION.--Lat 41°45'39", long 75°02'55", Sullivan County, Hydrologic Unit 02040101, on right bank 0.7 mi (1.1 km) southeast of Callicoon, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) west of Hortonville.

DRAINAGE AREA.--111 mi^2 (287 km^2).

PERIOD OF RECORD.--August 1940 to current year.

GAGE.--Water-stage recorder. Concrete control since July 1944. Datum of gage is 759.84 ft (231.599 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation by small pond above station.

AVERAGE DISCHARGE.--40 years, 179 ft^3/s (5.069 m^3/s), 21.90 in/yr (556 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s (453 m^3/s) Aug. 17, 1947, gage height, 9.68 ft (2.950 m), from rating curve extended above 5,100 ft^3/s (144 m^3/s) on basis of slope-area measurement of peak flow; minimum, 4.0 ft^3/s (0.11 m^3/s) July 26, 27, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft^3/s (62 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	1830	4,050	115	5.66	1.725	Mar. 21	2000	*4,450	126	*5.87	1.789
Mar. 17	2345	ice jam		7.22	2.201						

Minimum discharge, 8.3 ft^3/s (0.24 m^3/s) Sept. 11, 12, 13, 14, 15, 16, 17, gage height, 1.08 ft (0.329 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	70	251	131	35	22	431	306	39	136	23	11
2	415	142	210	121	34	21	378	255	38	79	26	11
3	255	803	174	109	32	20	319	217	42	67	62	12
4	306	398	161	80	31	19	526	180	42	54	42	11
5	343	276	147	76	30	23	442	156	34	50	102	11
6	746	228	139	74	29	28	333	142	30	113	153	13
7	353	203	131	72	28	45	284	144	54	69	77	12
8	315	177	118	68	27	70	255	123	57	51	54	11
9	310	156	102	62	26	130	723	111	50	44	42	10
10	297	174	98	60	25	90	924	102	47	39	31	9.4
11	225	177	93	64	25	60	532	98	41	36	29	8.8
12	214	150	91	90	24	45	398	121	36	50	28	8.8
13	217	133	95	76	24	40	343	128	30	37	23	8.8
14	171	142	100	72	23	45	362	243	26	30	21	8.3
15	150	123	85	68	22	56	723	161	24	28	28	8.3
16	136	126	81	66	22	80	448	123	29	26	25	8.3
17	118	116	100	64	22	250	338	104	24	28	21	10
18	109	116	78	62	21	700	284	109	21	25	19	19
19	100	109	72	60	21	370	243	136	24	22	17	14
20	89	100	70	58	21	280	214	111	20	20	17	12
21	85	95	70	54	21	2140	190	102	21	22	16	11
22	81	95	72	50	21	1710	167	95	19	44	16	11
23	77	93	74	47	20	879	150	83	17	39	16	10
24	116	93	100	42	20	612	136	72	15	31	15	8.8
25	98	190	442	40	20	619	131	65	15	25	14	8.8
26	83	1330	315	43	20	471	123	57	14	22	13	15
27	76	1320	225	49	21	425	126	51	13	20	13	13
28	79	585	186	44	22	404	306	47	13	18	12	11
29	89	404	171	41	23	762	707	44	50	20	11	11
30	81	306	161	39	---	685	425	42	301	39	11	10
31	74	---	144	37	---	513	---	39	---	30	11	---
TOTAL	6157	8430	4356	2019	710	11614	10961	3767	1186	1314	988	327.3
MEAN	199	281	141	65.1	24.5	375	365	122	39.5	42.4	31.9	10.9
MAX	746	1330	442	131	35	2140	924	306	301	136	153	19
MIN	74	70	70	37	20	19	123	39	13	18	11	8.3
CFSM	1.79	2.53	1.27	.59	.22	3.38	3.29	1.10	.36	.38	.29	.10
IN.	2.06	2.83	1.46	.68	.24	3.89	3.67	1.26	.40	.44	.33	.11

CAL YR 1979 TOTAL 78015.0 MEAN 214 MAX 3000 MIN 16 CFSM 1.93 IN 26.15
WTR YR 1980 TOTAL 51829.3 MEAN 142 MAX 2140 MIN 8.3 CFSM 1.28 IN 17.37

01427510 DELAWARE RIVER AT CALLICOON, NY

LOCATION.--Lat 41°45'24", long 75°03'30", Wayne County, Pennsylvania, Hydrologic Unit 02040101, on right bank, 0.5 mi (0.8 km) downstream from Callicoon Creek, 0.5 mi (0.8 km) downstream from Interstate Bridge 7, and 0.8 mi (1.1 km) southeast of Callicoon. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,882 mi² (4,719 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map (nearest 20 ft).

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,400 ft³/s (1,597 m³/s) Mar. 14, 1977, gage height, 11.49 ft (3.502 m), minimum 335 ft³/s (9.49 m³/s) Sept. 13, 1977, gage height, 2.20 ft (0.671 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50,300 ft³/s (1,424 m³/s) Mar. 22, gage height, 10.9 ft (3.325 m); minimum daily discharge, 440 ft³/s (12.5 m³/s) Mar. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	986	4330	1400	490	450	8770	6810	1020	2190	1030	1400
2	3890	1150	4050	1300	480	450	7740	6050	1120	1310	1420	999
3	3030	6540	3650	1200	470	440	6720	5380	939	1060	1680	1090
4	4010	6560	3320	1100	460	440	6980	4600	781	943	1250	1120
5	3400	4710	2960	1000	460	470	7680	3900	985	869	1220	1110
6	6810	3690	2510	960	700	580	6630	3360	1070	1110	1080	1770
7	5290	3090	2170	920	800	700	5830	3030	1200	1240	959	1430
8	4250	2690	1830	880	760	900	5250	2720	1010	978	844	1080
9	3630	2350	1660	820	720	1300	6530	2370	804	893	1240	1080
10	4290	2210	1590	780	680	1500	13300	2110	1000	846	1160	1080
11	3400	2200	1550	960	660	1300	10700	1910	895	808	835	1130
12	2910	1910	1500	1300	640	1000	9470	1870	619	1270	680	1270
13	3030	1640	1500	1200	620	840	8670	1790	628	1000	735	1520
14	2660	1530	1530	1100	700	720	7840	2080	1270	718	775	1470
15	2320	1420	1370	1000	860	660	9490	1730	1150	678	1010	862
16	2070	1340	1270	940	780	760	8930	1390	854	669	1470	869
17	1800	1260	1300	900	660	800	7690	1220	983	685	1130	895
18	1610	1200	1100	900	580	2000	6710	1120	951	691	908	1060
19	1440	1210	1000	880	540	3500	6010	1230	929	1080	911	1060
20	1310	1150	1000	880	500	4500	5360	1260	1000	1020	966	1550
21	1220	1080	1000	860	720	8000	4810	1180	1430	712	1000	1480
22	1130	1040	1200	800	740	33100	4100	1130	1350	750	1130	865
23	1040	1030	1100	780	680	10500	3340	1050	1050	944	1380	750
24	1390	1020	1140	760	600	6980	2840	964	1270	780	1390	786
25	1760	1520	2650	740	540	7330	2540	877	1310	885	1210	730
26	1400	5540	3630	800	490	5850	2330	785	1230	1330	1170	782
27	1240	20600	2800	860	480	4780	2160	722	1270	1170	1220	1520
28	1160	9190	2430	800	470	5180	2710	717	1450	882	1240	1330
29	1230	6080	2110	700	450	7050	6260	762	1520	646	1360	846
30	1180	4700	1900	580	---	9690	7510	966	2280	1150	1570	822
31	1060	---	1680	520	---	9450	---	986	---	925	1600	---
TOTAL	76360	100636	62830	28620	17730	131220	194900	66069	33368	30232	35573	33756
MEAN	2463	3355	2027	923	611	4233	6497	2131	1112	975	1148	1125
MAX	6810	20600	4330	1400	860	33100	13300	6810	2280	2190	1680	1770
MIN	1040	986	1000	520	450	440	2160	717	619	646	680	730

CAL YR 1979 TOTAL 1209831 MEAN 3315 MAX 43500 MIN 489
WTR YR 1980 TOTAL 811294 MEAN 2217 MAX 33100 MIN 440

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1975 to current year.

INSTRUMENTATION.--Temperature recorder since June 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1976-80), 29.5°C Aug. 7-9, 1980; minimum freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 29.5°C Aug. 7-9; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	13.5	13.5	6.5	4.5	5.5	4.0	3.5	3.5	1.5	1.0	1.0
2	14.0	13.5	14.0	7.5	6.5	7.0	3.5	3.0	3.5	1.0	1.0	1.0
3	14.5	14.0	14.0	7.5	7.0	7.5	3.0	3.0	3.0	1.0	1.0	1.0
4	14.5	14.0	14.0	7.0	5.5	6.0	3.0	3.0	3.0	1.0	1.0	1.0
5	14.0	13.5	14.0	5.5	5.0	5.5	4.0	3.5	3.5	1.0	1.0	1.0
6	13.0	12.0	12.5	5.5	5.0	5.0	4.0	3.5	4.0	.5	.5	.5
7	12.0	10.5	11.5	5.0	5.0	5.0	5.0	4.5	4.5	.5	.5	.5
8	10.5	9.0	9.5	5.5	5.0	5.0	5.5	3.5	5.0	.5	.5	.5
9	9.0	8.5	9.0	5.5	5.0	5.5	3.5	3.0	3.0	.5	.5	.5
10	8.5	7.0	8.0	6.5	5.5	6.0	3.5	3.0	3.0	.5	.5	.5
11	7.0	7.0	7.0	6.5	6.5	6.5	4.5	3.5	4.0	.5	.5	.5
12	7.0	7.0	7.0	6.5	6.5	6.5	5.5	4.0	5.0	.5	.5	.5
13	7.5	7.0	7.0	6.0	6.0	6.0	5.5	5.5	5.5	.5	.5	.5
14	7.5	7.0	7.5	6.0	5.0	5.5	5.0	3.5	4.5	.5	.5	.5
15	6.5	6.5	6.5	5.0	4.0	4.5	3.5	2.0	2.5	.5	.5	.5
16	7.5	6.0	6.5	4.5	3.0	4.0	2.5	2.0	2.0	.5	.5	.5
17	7.5	6.5	7.0	3.5	2.0	2.5	2.5	1.5	2.0	.0	.0	.0
18	10.0	7.5	8.5	4.0	2.5	3.5	1.5	1.5	1.5	.0	.0	.0
19	11.0	8.5	9.5	4.5	3.5	4.0	1.5	1.5	1.5	.0	.0	.0
20	12.5	10.0	11.0	5.5	4.5	5.0	1.5	1.5	1.5	.0	.0	.0
21	14.0	11.5	12.5	6.5	5.0	6.0	1.5	1.5	1.5	.0	.0	.0
22	15.5	12.5	14.0	6.5	6.0	6.5	1.5	1.5	1.5	.0	.0	.0
23	15.5	13.5	14.5	8.0	6.5	7.5	1.5	1.5	1.5	.0	.0	.0
24	14.5	10.5	12.5	9.0	8.0	8.5	1.5	1.5	1.5	.0	.0	.0
25	10.5	8.5	9.5	10.0	9.5	9.5	3.0	1.0	1.5	.0	.0	.0
26	8.5	6.0	7.0	12.5	10.5	11.5	3.0	2.5	2.5	.0	.0	.0
27	6.0	4.5	5.0	11.5	9.0	10.5	3.0	3.0	3.0	.0	.0	.0
28	4.5	4.0	4.0	9.0	7.0	8.0	3.0	2.0	2.5	.0	.0	.0
29	4.0	4.0	4.0	7.0	5.5	6.5	2.0	2.0	2.0	.0	.0	.0
30	5.0	4.0	4.5	5.5	4.0	5.0	2.0	2.0	2.0	.0	.0	.0
31	5.5	4.0	4.5	---	---	---	2.0	1.5	2.0	.0	.0	.0
MONTH	15.5	4.0	9.5	12.5	2.0	6.0	5.5	1.0	3.0	1.5	.0	.5

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	4.5	3.0	4.0	12.5	10.5	11.5
2	.0	.0	.0	.0	.0	.0	4.5	4.0	4.5	12.5	11.5	12.0
3	.0	.0	.0	.0	.0	.0	5.5	3.5	4.5	14.0	12.0	13.0
4	.0	.0	.0	.0	.0	.0	5.5	5.5	5.5	15.0	13.0	13.5
5	.0	.0	.0	.0	.0	.0	5.5	5.0	5.5	15.5	12.5	14.0
6	.0	.0	.0	.0	.0	.0	6.0	4.5	5.5	15.5	13.0	14.0
7	.0	.0	.0	.0	.0	.0	7.5	6.0	6.5	15.5	12.5	14.0
8	.0	.0	.0	.0	.0	.0	7.0	7.0	7.0	14.5	12.0	13.0
9	.0	.0	.0	.0	.0	.0	7.5	7.0	7.0	12.5	10.5	11.5
10	.0	.0	.0	.0	.0	.0	7.5	7.0	7.0	14.5	9.5	12.0
11	.0	.0	.0	.0	.0	.0	7.5	7.0	7.0	12.0	11.5	12.0
12	.0	.0	.0	.0	.0	.0	7.5	6.5	7.0	13.0	11.5	12.0
13	.0	.0	.0	.0	.0	.0	8.0	7.0	7.5	16.0	12.5	14.0
14	.0	.0	.0	.0	.0	.0	8.0	6.5	7.0	15.5	13.5	14.5
15	.0	.0	.0	.0	.0	.0	7.5	6.0	7.0	15.0	12.5	14.0
16	.0	.0	.0	.0	.0	.0	7.0	5.0	6.5	17.5	11.0	14.0
17	.0	.0	.0	.0	.0	.0	5.5	4.0	5.0	19.0	12.5	16.0
18	.0	.0	.0	.0	.0	.0	6.5	5.5	6.0	16.5	14.5	15.0
19	.0	.0	.0	1.0	.0	.5	8.0	5.5	7.0	18.0	14.5	16.0
20	.0	.0	.0	1.0	.5	.5	9.0	7.5	8.0	20.0	15.0	17.5
21	.0	.0	.0	1.5	.5	1.0	10.5	7.5	9.0	18.0	16.0	17.0
22	.0	.0	.0	1.5	1.0	1.0	11.0	8.5	9.5	20.5	15.0	18.0
23	.0	.0	.0	2.5	1.0	1.5	12.0	8.0	10.0	22.0	16.5	19.5
24	.0	.0	.0	3.5	2.5	3.0	14.0	9.5	11.5	23.0	18.5	21.0
25	.0	.0	.0	3.5	3.0	3.0	12.0	11.0	11.5	23.0	19.5	21.5
26	.0	.0	.0	2.5	2.5	2.5	13.0	10.0	11.5	20.5	17.5	19.0
27	.0	.0	.0	4.0	2.5	3.0	11.0	10.5	10.5	19.5	16.0	18.0
28	.0	.0	.0	5.0	3.5	4.5	10.5	9.0	9.5	20.5	15.0	18.0
29	.0	.0	.0	4.5	4.0	4.5	9.0	8.5	8.5	23.0	17.5	20.0
30	---	---	---	4.0	3.5	3.5	10.5	8.5	9.5	21.5	18.0	20.0
31	---	---	---	3.5	3.5	3.5	---	---	---	22.0	18.0	20.0
MONTH	.0	.0	.0	5.0	.0	1.0	14.0	3.0	7.5	23.0	9.5	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.5	19.0	21.5	21.5	16.5	19.0	27.0	22.5	24.5	23.5	20.0	21.5
2	22.0	20.0	21.0	20.5	19.0	20.0	25.5	22.0	23.5	26.0	21.5	23.5
3	21.5	19.5	20.5	21.0	19.0	20.0	22.5	20.5	21.5	25.5	22.0	24.0
4	20.0	18.0	19.0	25.0	19.5	22.5	25.0	20.0	22.0	25.0	21.0	23.0
5	22.0	16.5	19.5	24.0	21.5	23.0	27.0	22.5	24.5	23.0	21.5	22.0
6	21.5	16.5	19.0	24.0	20.5	22.0	28.5	24.5	26.5	22.5	20.0	21.5
7	19.5	17.5	18.0	24.0	19.0	21.5	29.5	24.5	27.0	22.5	19.5	21.0
8	18.0	14.5	17.0	23.5	20.0	21.5	29.5	26.0	28.0	22.0	18.0	20.0
9	14.0	12.0	13.0	25.0	20.5	23.0	29.5	26.5	28.0	21.5	18.0	20.0
10	15.5	12.5	14.0	26.5	22.0	24.0	27.0	23.5	25.0	21.0	18.5	20.0
11	14.5	11.5	13.5	26.0	22.5	24.5	25.0	23.5	24.5	21.5	17.5	19.5
12	18.0	13.0	15.5	25.5	22.5	24.0	25.0	23.5	24.5	20.5	18.0	19.0
13	21.5	15.5	18.5	24.5	19.5	22.0	27.0	23.5	25.0	20.5	18.0	19.0
14	24.0	17.5	21.0	26.0	20.0	23.0	25.5	23.0	24.0	20.5	18.5	19.5
15	23.0	18.5	21.0	25.5	22.5	24.0	25.5	23.0	24.0	20.0	17.5	18.5
16	22.0	18.0	20.0	27.5	24.0	26.0	24.0	20.0	21.5	18.5	16.5	17.5
17	23.0	17.0	20.5	27.5	24.0	26.0	22.5	17.5	20.0	18.0	17.0	17.5
18	22.5	18.0	20.5	28.5	24.5	26.5	22.5	19.5	21.0	18.5	17.0	17.5
19	23.5	18.5	21.0	28.5	24.0	26.5	23.0	20.5	21.5	19.5	16.0	17.5
20	21.0	17.0	18.5	27.0	24.0	25.5	24.0	21.0	22.5	19.0	17.0	18.0
21	19.5	15.5	17.5	28.5	24.0	26.0	24.5	21.0	22.5	21.5	17.5	19.5
22	21.0	14.5	18.0	27.5	25.0	26.0	24.0	20.5	22.5	23.5	19.5	21.5
23	22.5	16.5	19.5	27.5	25.0	26.0	23.5	20.5	22.0	23.0	21.0	22.0
24	24.0	18.5	21.5	27.0	23.5	25.5	23.5	19.5	21.5	21.0	18.0	19.5
25	24.0	19.5	22.0	27.5	23.0	25.5	24.0	20.0	22.0	19.0	16.5	17.5
26	23.5	19.5	21.5	26.0	23.0	25.0	24.5	20.5	22.5	17.5	15.5	16.5
27	24.0	19.5	22.0	24.5	21.5	23.0	25.0	21.0	23.0	15.0	13.0	14.5
28	21.5	18.5	20.0	24.5	21.5	23.0	23.5	21.5	22.5	15.5	12.5	14.0
29	18.0	16.5	17.0	24.5	22.5	23.5	23.0	20.5	21.5	16.0	13.0	14.5
30	18.5	15.5	17.0	26.0	22.5	24.5	23.0	20.0	21.5	17.5	15.0	16.0
31	---	---	---	25.0	21.5	23.5	23.0	20.5	21.5	---	---	---
MONTH	24.0	11.5	19.0	28.5	16.5	23.5	29.5	17.5	23.5	26.0	12.5	19.0

01427705 DELAWARE RIVER AT SKINNERS FALLS, NY

LOCATION.--Lat 41°40'12", long 75°03'28", Sullivan County, Hydrologic Unit 02040101, at Skinners Falls Interstate Bridge No. 5 at Skinners Falls, 1,000 ft (305 m) downstream from Calkins Creek, and 5.3 miles (8.5 km) north of Narrowsburg.

DRAINAGE AREA.--1,902 mi² (4,926 km²).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to July 1970, June to September 1971, August 1973 to November 1979 (discontinued).

INSTRUMENTATION.--Temperature recorder since October 1967.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 31.5°C Aug. 2, 1975; minimum, freezing point on many days during winter periods.

TEMPERATURE (DEG. C) OF WATER, OCTOBER TO NOVEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.5	15.5	15.5	9.0	7.0	7.5						
2	16.5	15.0	16.0	10.0	8.5	9.5						
3	16.5	15.5	16.0	10.0	8.5	9.5						
4	16.5	15.5	16.0	8.5	7.5	8.0						
5	16.0	15.5	15.5	8.0	6.5	7.0						
6	15.0	14.0	14.5	7.0	6.5	6.5						
7	14.0	12.5	13.5	7.0	6.5	7.0						
8	12.5	11.0	11.5	7.0	6.5	7.0						
9	11.0	10.0	11.0	7.5	6.0	6.5						
10	10.0	9.0	9.5	8.0	7.5	7.5						
11	9.5	8.5	9.0	8.0	7.5	8.0						
12	9.0	8.5	8.5	8.0	7.5	7.5						
13	10.0	8.5	9.0	7.5	7.0	7.0						
14	10.0	8.5	9.0	7.0	6.0	6.5						
15	9.0	8.0	8.5	6.0	5.0	5.5						
16	10.0	7.5	9.0	5.0	3.5	4.5						
17	10.0	8.5	9.0	5.0	2.5	3.5						
18	12.5	9.5	11.0	5.0	3.0	4.0						
19	13.0	10.5	11.5	---	---	---						
20	14.5	12.0	13.0	---	---	---						
21	16.5	13.5	15.0	---	---	---						
22	17.5	15.0	16.0	---	---	---						
23	17.5	15.5	16.5	---	---	---						
24	16.5	13.0	15.0	---	---	---						
25	13.0	10.5	11.5	---	---	---						
26	10.5	8.0	9.0	---	---	---						
27	8.0	6.5	7.0	---	---	---						
28	6.5	6.0	6.0	---	---	---						
29	7.0	6.5	6.5	---	---	---						
30	7.5	6.5	7.0	---	---	---						
31	8.5	6.0	7.0	---	---	---						
MONTH	17.5	6.0	11.5	10.0	2.5	7.0						

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'31", long 74°59'11", Sullivan County, Hydrologic Unit 02040101, on left bank 1.6 mi (2.6 km) upstream from Lackawaxen River, and 4.6 mi (7.4 km) northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,023 mi^2 (5,240 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft (182.947 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi^2 (961 km^2) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow of these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130,000 ft^3/s (3,680 m^3/s) Aug. 19, 1955, gage height, 26.40 ft (8.047 m) from floodmarks in gage house, from rating curve extended above 55,000 ft^3/s (1,560 m^3/s) on basis of slope-area measurement at gage height 23.19 ft (7.068 m); minimum, 122 ft^3/s (3.46 m^3/s) Sept. 5, 1953, gage height, 1.11 ft (0.338 m); minimum daily, 126 ft^3/s (3.57 m^3/s) Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49,900 ft^3/s (1,413 m^3/s) Mar. 22, gage height, 14.78 ft (4.505 m); minimum, 524 ft^3/s (14.84 m^3/s) June 14, gage height, 2.19 ft (0.668 m); minimum daily, 540 ft^3/s (15.29 m^3/s) Feb. 2-5, Feb. 28-Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	1220	4600	1850	560	540	10600	8210	1040	2650	887	1460
2	3760	1200	4220	1600	540	540	9150	7020	1130	1630	1280	1180
3	3410	5770	3830	1300	540	540	8050	6090	1160	1250	1640	1030
4	4130	7980	3490	1200	540	560	8260	5160	807	1080	1350	1210
5	3410	5270	3160	1100	540	600	9260	4330	880	977	1250	1110
6	6880	4030	2750	1100	800	660	8050	3780	1100	1140	1150	1520
7	6020	3360	2400	1100	900	760	6860	3450	1210	1370	1040	1550
8	4430	2930	2120	1200	860	1000	6080	3160	1250	1170	879	1240
9	3660	2570	1950	1500	820	1600	6540	2770	848	1000	1040	1110
10	4200	2360	1880	1600	800	1800	14700	2460	962	935	1160	1140
11	3570	2370	1850	1600	780	1500	12900	2240	1040	877	1090	1170
12	3430	2190	1810	1600	760	1300	11100	2260	735	1110	735	1230
13	3010	1950	1800	1500	740	1200	10200	2180	570	1220	665	1460
14	2820	1830	1890	1400	840	1000	9330	2270	963	921	850	1540
15	2440	1740	1750	1400	1000	800	11400	2170	1250	740	782	1110
16	2220	1660	1610	1500	900	820	10900	1780	964	719	1400	856
17	2010	1610	1610	1400	800	880	9150	1510	1000	741	1320	981
18	1810	1490	1300	1300	740	2500	7810	1360	872	705	1020	977
19	1680	1480	1100	1200	680	5000	6790	1400	993	898	920	1150
20	1530	1440	1100	1200	620	5400	5930	1470	958	1120	924	1360
21	1420	1350	1200	1200	840	10800	5240	1370	1230	887	1080	1520
22	1340	1280	1400	1200	880	38600	4540	1290	1460	772	1040	1110
23	1240	1240	1400	1100	740	14500	3770	1190	1190	917	1320	781
24	1390	1230	1300	1100	660	9070	3230	1080	1150	886	1430	731
25	1940	1470	2780	1100	580	9170	2880	998	1270	782	1250	830
26	1720	3880	4100	1100	560	7480	2620	896	1300	1220	1230	805
27	1530	22500	3280	1100	560	5810	2440	818	1190	1260	1210	1190
28	1450	11800	2750	900	540	5880	3050	767	1370	1020	1270	1470
29	1470	7250	2440	760	540	7710	7490	770	1580	813	1310	1070
30	1460	5220	2240	640	---	11300	9390	953	1980	782	1550	871
31	1330	---	2060	580	---	11200	---	1050	---	1250	1560	---
TOTAL	82040	111670	71170	38430	20660	160520	227710	76252	33452	32842	35632	34762
MEAN	2646	3722	2296	1240	712	5178	7590	2460	1115	1059	1149	1159
MAX	6880	22500	4600	1850	1000	38600	14700	8210	1980	2650	1640	1550
MIN	1240	1200	1100	580	540	540	2440	767	570	705	665	731

CAL YR 1979 TOTAL 1362103 MEAN 3732 MAX 45200 MIN 633
WTR YR 1980 TOTAL 925140 MEAN 2528 MAX 38600 MIN 540

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.
CHEMICAL DATA: 1971-73 (a).
NUTRIENT DATA: 1971 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no record for winter months each year except water years 1968, 1977-80).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record May 31 to June 24, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75, 1980), 32.0°C Aug. 2, 3 1975; minimum (water years 1968, 1977-80), freezing point on many days during winter periods, each year except 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 30.5°C July 21, Aug. 8, 9; minimum 1.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	15.0	16.5	9.5	6.5	8.0	4.5	3.5	4.0	2.5	1.0	1.5
2	17.0	16.0	16.5	10.0	8.5	9.5	3.5	3.0	3.5	1.5	1.0	1.0
3	17.0	16.5	16.5	10.0	9.5	9.5	3.0	2.5	2.5	1.5	1.0	1.0
4	17.0	16.0	16.5	9.5	8.5	8.5	3.0	2.5	2.5	1.0	1.0	1.0
5	16.5	16.0	16.5	8.0	7.5	7.5	3.5	3.0	3.5	1.0	1.0	1.0
6	16.0	15.0	15.5	7.5	7.0	7.0	4.0	3.0	3.5	1.5	1.0	1.0
7	15.0	13.5	14.0	7.0	7.0	7.0	5.0	4.0	4.5	1.0	1.0	1.0
8	13.0	12.0	12.5	7.5	7.0	7.0	5.0	3.5	4.5	1.0	1.0	1.0
9	12.0	11.0	11.5	7.5	7.0	7.5	3.5	2.5	3.0	1.0	1.0	1.0
10	11.0	9.5	10.5	8.5	7.5	8.0	3.5	2.5	3.0	1.0	1.0	1.0
11	10.0	9.0	9.5	8.5	8.0	8.0	4.5	2.5	3.5	1.0	1.0	1.0
12	9.0	9.0	9.0	8.5	8.0	8.0	5.0	3.0	4.0	1.0	1.0	1.0
13	10.0	9.0	9.5	8.5	8.0	8.0	5.0	4.5	4.5	1.0	1.0	1.0
14	9.5	9.0	9.5	8.0	6.5	7.5	4.5	3.5	4.0	1.0	1.0	1.0
15	9.5	9.0	9.0	6.5	6.0	6.5	3.5	2.0	3.0	1.0	1.0	1.0
16	10.5	8.5	9.5	6.0	4.5	5.5	3.0	1.5	2.5	1.0	1.0	1.0
17	10.0	9.0	9.5	6.0	4.0	5.0	2.5	1.0	1.5	1.0	1.0	1.0
18	12.0	9.5	10.5	6.0	3.5	5.0	1.0	1.0	1.0	1.0	1.0	1.0
19	13.0	11.0	12.0	6.5	4.5	5.5	1.0	1.0	1.0	1.0	1.0	1.0
20	15.0	12.0	13.0	7.5	5.0	6.0	1.0	1.0	1.0	1.5	1.0	1.0
21	16.5	13.5	15.0	8.0	5.5	6.5	1.0	1.0	1.0	1.5	1.0	1.0
22	18.0	14.5	16.0	7.5	6.5	7.0	1.0	1.0	1.0	1.0	1.0	1.0
23	17.5	15.5	16.5	9.5	7.5	8.0	1.0	1.0	1.0	1.0	1.0	1.0
24	16.5	14.5	15.5	10.0	8.0	9.0	1.0	1.0	1.0	1.5	1.0	1.0
25	14.5	12.0	13.0	11.0	10.0	10.5	2.5	1.0	1.5	1.0	1.0	1.0
26	11.5	9.5	10.5	12.5	11.0	12.0	3.0	1.5	2.5	1.0	1.0	1.0
27	9.0	7.5	8.5	13.0	10.0	11.5	3.0	2.5	3.0	1.0	1.0	1.0
28	7.5	7.0	7.0	10.0	8.5	9.0	3.0	2.5	2.5	1.0	1.0	1.0
29	7.5	7.0	7.0	8.0	6.5	7.0	3.0	2.5	2.5	1.0	1.0	1.0
30	8.0	7.0	7.0	6.0	4.5	5.5	3.0	2.0	2.5	1.5	1.0	1.0
31	9.0	6.0	7.5	---	---	---	3.0	1.5	2.0	1.5	1.0	1.0
MONTH	18.0	6.0	12.0	13.0	3.5	7.5	5.0	1.0	2.5	2.5	1.0	1.0

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	1.0	1.0	1.0	1.0	1.0	5.5	4.0	4.5	13.0	10.5	11.5
2	1.5	1.0	1.0	1.0	1.0	1.0	6.0	5.5	5.5	13.5	12.0	13.0
3	1.5	1.0	1.0	1.0	1.0	1.0	6.5	4.5	5.5	14.5	12.5	13.5
4	1.5	1.0	1.0	1.0	1.0	1.0	7.0	6.0	6.5	15.0	13.0	14.0
5	1.0	1.0	1.0	1.0	1.0	1.0	7.0	6.0	6.5	15.5	13.5	14.5
6	1.5	1.0	1.0	1.5	1.0	1.0	7.5	5.5	6.5	16.5	14.5	15.5
7	1.0	1.0	1.0	1.5	1.0	1.0	8.5	6.5	7.5	16.0	14.5	15.5
8	1.0	1.0	1.0	1.0	1.0	1.0	8.5	7.5	8.0	15.5	14.0	14.5
9	1.0	1.0	1.0	1.0	1.0	1.0	9.0	8.0	8.5	14.0	12.0	13.0
10	1.0	1.0	1.0	1.0	1.0	1.0	9.0	8.0	8.5	14.5	11.0	12.5
11	1.0	1.0	1.0	1.0	1.0	1.0	9.0	8.0	8.5	13.5	12.5	13.0
12	1.0	1.0	1.0	1.5	1.0	1.0	9.0	8.0	8.5	14.0	12.0	13.0
13	1.0	1.0	1.0	1.0	1.0	1.0	9.5	8.0	9.0	15.5	13.0	14.0
14	1.0	1.0	1.0	1.0	1.0	1.0	9.5	7.5	8.5	17.0	14.5	15.5
15	1.0	1.0	1.0	1.0	1.0	1.0	8.0	7.0	7.5	16.0	14.0	15.0
16	1.0	1.0	1.0	1.0	1.0	1.0	8.0	6.5	7.5	17.5	13.0	15.0
17	1.0	1.0	1.0	1.0	1.0	1.0	6.5	5.0	6.0	18.5	13.5	16.0
18	1.0	1.0	1.0	1.5	1.0	1.0	7.5	5.5	7.0	16.5	15.5	15.5
19	1.0	1.0	1.0	1.5	1.0	1.0	9.0	6.5	8.0	19.0	15.0	17.0
20	1.0	1.0	1.0	2.0	1.0	1.5	9.5	8.0	9.0	19.5	16.0	17.5
21	1.0	1.0	1.0	2.0	1.0	1.5	11.0	9.0	10.0	19.0	17.0	18.0
22	1.0	1.0	1.0	2.0	1.5	2.0	11.0	9.5	10.5	20.5	16.0	18.5
23	1.0	1.0	1.0	3.5	2.0	3.0	12.0	10.0	11.0	22.0	17.0	19.5
24	1.0	1.0	1.0	4.5	3.0	3.5	13.5	11.0	12.0	23.5	19.0	21.0
25	1.5	1.0	1.0	4.5	4.0	4.0	13.0	12.0	12.5	24.5	19.5	21.5
26	1.0	1.0	1.0	4.0	3.5	3.5	13.5	11.5	12.5	22.5	18.0	20.0
27	1.0	1.0	1.0	5.0	3.0	4.0	12.0	11.0	12.0	22.0	16.5	19.0
28	1.0	1.0	1.0	5.5	4.0	5.0	11.0	10.0	10.5	22.0	16.5	19.0
29	1.0	1.0	1.0	5.5	5.0	5.5	10.0	9.5	9.5	23.0	17.5	20.0
30	---	---	---	5.0	4.5	4.5	10.5	9.0	10.0	21.5	19.0	20.0
31	---	---	---	4.5	4.5	4.5	---	---	---	---	---	---
MONTH	2.0	1.0	1.0	5.5	1.0	2.0	13.5	4.0	8.5	24.5	10.5	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	21.5	18.5	20.0	27.5	23.5	25.0	24.5	21.5	23.0
2	---	---	---	21.5	20.0	20.5	26.5	23.5	25.0	25.5	21.5	23.5
3	---	---	---	22.5	20.0	21.0	26.5	24.0	25.5	26.5	22.0	24.0
4	---	---	---	26.0	20.5	23.0	26.5	22.5	24.5	26.0	22.0	24.0
5	---	---	---	25.5	22.0	24.0	26.0	23.0	25.0	24.0	21.5	23.0
6	---	---	---	25.5	22.0	23.5	28.0	24.0	26.0	24.5	21.5	23.0
7	---	---	---	24.5	20.0	22.5	29.5	24.5	27.0	24.0	20.5	22.0
8	---	---	---	24.5	21.0	22.5	30.5	26.0	28.0	23.5	19.5	21.0
9	---	---	---	26.0	21.5	23.5	30.5	27.0	28.5	22.5	18.5	20.5
10	---	---	---	27.5	22.5	25.0	28.5	25.5	27.0	22.5	18.5	21.0
11	---	---	---	27.0	23.5	25.0	28.0	25.0	26.5	22.5	18.0	20.5
12	---	---	---	27.0	23.5	25.0	27.5	25.0	26.0	22.0	18.5	20.0
13	---	---	---	27.0	22.0	24.5	26.5	23.5	25.0	21.5	18.5	20.0
14	---	---	---	27.5	22.0	24.5	25.5	23.5	24.0	21.5	19.5	20.5
15	---	---	---	26.5	23.0	25.0	26.5	23.5	24.5	20.0	18.0	19.0
16	---	---	---	29.0	24.5	26.5	23.5	21.5	22.5	19.0	16.5	18.0
17	---	---	---	29.5	24.5	27.0	24.0	20.0	22.0	18.5	17.0	18.0
18	---	---	---	30.0	25.5	27.5	23.0	20.0	21.5	19.5	17.5	18.0
19	---	---	---	29.0	25.5	27.5	23.5	20.5	21.5	21.0	16.0	18.5
20	---	---	---	30.0	25.5	27.5	24.5	21.5	22.5	19.5	17.0	18.5
21	---	---	---	30.5	26.0	28.5	23.5	21.5	22.5	22.0	18.5	20.0
22	---	---	---	29.5	26.5	28.0	23.0	21.0	22.0	24.0	18.5	21.5
23	---	---	---	28.0	25.5	26.5	25.0	21.5	23.0	24.0	21.0	22.5
24	---	---	---	28.5	24.0	26.0	24.5	20.5	23.0	22.5	19.0	20.5
25	26.0	22.0	24.0	28.5	23.5	26.0	25.0	21.0	23.0	20.0	17.5	18.5
26	26.5	22.5	24.5	28.5	24.0	26.0	26.0	18.5	23.0	20.0	16.5	18.0
27	26.5	22.5	24.5	28.0	24.5	26.0	26.5	22.0	24.5	17.5	14.5	16.0
28	24.5	21.5	23.0	26.5	23.5	25.0	26.0	18.5	24.0	17.0	13.5	15.0
29	22.0	20.0	21.0	25.0	23.5	24.0	25.5	23.0	24.0	17.0	13.5	15.0
30	21.0	19.0	20.0	26.5	23.0	24.5	25.0	22.5	23.5	18.0	15.5	16.5
31	---	---	---	27.0	23.0	25.0	24.5	22.0	23.0	---	---	---
MONTH				30.5	18.5	25.0	30.5	18.5	24.5	26.5	13.5	20.0

01432160 DELAWARE RIVER AT BARRYVILLE, NY

LOCATION.--Lat 41°28'31", long 74°54'46", Pike County, Pa. Hydrologic Unit 02040104, at Shohola-Barryville Bridge at Barryville, just upstream from Halfway Brook, and 1,000 ft (305 m) upstream from Shohola Brook.

DRAINAGE AREA.--2,692 mi^2 (6,972 km^2).

PERIOD OF RECORD.--Water years 1958, 1968 to current year.
CHEMICAL DATA: 1958 (d), 1969 (a), 1973 (b), 1974 (d), 1975 (b).
NUTRIENT DATA: 1973 (b), 1974 (d), 1975 (b).
BIOLOGICAL DATA:
Bacteria.--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to September 1973, March 1975 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Unpublished records of daily temperatures for May to September 1964-66 are available in files of the Geological Survey. Temperature probe may be influenced by solar radiation during periods of low flow. No record Nov. 30 to Dec. 10, Mar. 4, July 15-17, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-73, 1976-78, 1980), 32.0°C July 20, 21, 1980; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum 32.0°C July 20, 21; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.0	16.5	16.5	7.5	6.0	6.5	---	---	---	1.5	.5	1.0
2	17.0	15.5	16.5	9.0	7.5	8.5	---	---	---	1.5	.0	.5
3	16.5	16.0	16.5	9.0	8.0	8.5	---	---	---	1.5	.0	.5
4	17.0	15.5	16.0	8.0	7.0	7.5	---	---	---	.5	.0	.5
5	16.5	15.5	16.0	7.0	6.0	6.5	---	---	---	1.0	.0	.5
6	15.5	14.5	15.0	6.0	6.0	6.0	---	---	---	.5	.0	.5
7	14.5	13.0	13.5	6.0	6.0	6.0	---	---	---	.0	.0	.0
8	13.5	11.5	12.5	6.0	6.0	6.0	---	---	---	1.0	.0	.5
9	12.5	12.0	12.5	7.0	6.0	6.5	---	---	---	.5	.0	.0
10	12.0	10.0	11.0	7.5	7.0	7.5	---	---	---	.5	.0	.0
11	11.0	9.5	10.0	7.5	7.0	7.0	4.5	2.5	3.5	1.5	.0	.5
12	10.5	9.5	10.0	7.5	7.0	7.0	5.5	3.0	4.0	2.0	.0	.5
13	10.5	9.5	10.0	7.0	6.5	7.0	5.5	4.5	4.5	.0	.0	.0
14	9.0	8.5	9.0	7.0	5.5	6.5	4.5	3.5	3.5	.5	.0	.0
15	10.5	8.0	9.0	5.5	4.5	5.0	3.5	1.5	2.0	1.0	.5	.5
16	11.0	9.0	10.0	5.0	3.5	4.5	2.5	1.0	1.5	.5	.0	.5
17	11.0	9.5	10.0	4.0	2.5	3.5	2.5	.0	1.0	1.0	.0	.5
18	12.0	10.5	11.0	4.0	3.0	3.5	.5	.0	.5	1.5	1.0	1.0
19	13.0	11.0	12.0	4.5	4.0	4.0	.5	.0	.5	1.5	1.0	1.0
20	13.0	12.0	12.5	5.0	4.5	5.0	1.0	.0	.5	1.0	.0	.5
21	15.0	13.0	14.0	5.5	5.0	5.5	2.0	.5	1.0	1.0	.0	.5
22	15.5	14.5	15.0	6.5	6.0	6.0	2.0	1.0	1.5	.5	.0	.0
23	16.0	14.5	15.0	7.5	6.5	7.0	2.0	1.0	1.5	1.0	.0	.5
24	15.5	13.0	14.5	8.5	7.5	8.0	1.5	1.0	1.5	1.5	.0	.5
25	13.0	11.0	12.0	9.5	8.5	9.0	3.0	1.5	2.5	1.5	.0	.5
26	11.5	9.5	10.5	11.5	10.0	11.0	3.0	2.5	2.5	.5	.0	.0
27	9.5	7.0	8.0	11.5	9.0	10.5	2.5	2.0	2.5	.5	.0	.5
28	7.0	6.0	6.0	9.0	7.5	8.0	2.5	2.0	2.0	.5	.0	.0
29	6.5	6.0	6.5	3.5	2.5	3.0	2.5	2.0	2.5	1.0	.0	.5
30	7.0	6.0	6.5	---	---	---	2.0	1.5	2.0	2.0	.0	.5
31	6.5	5.5	6.0	---	---	---	2.0	1.0	1.5	1.5	.0	.5
MONTH	17.0	5.5	11.5	11.5	2.5	6.5				2.0	.0	.5

01432160 DELAWARE RIVER AT BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.0	.0	.5	.0	.5	5.0	3.0	4.0	12.0	10.0	11.0
2	.0	.0	.0	.5	.0	.5	5.0	4.5	4.5	12.5	11.0	12.0
3	.0	.0	.0	.0	.0	.0	6.5	4.0	5.0	15.0	12.0	13.5
4	.5	.0	.0	---	---	---	6.5	5.5	6.0	15.0	13.5	14.5
5	.0	.0	.0	.0	.0	.0	6.5	5.0	6.0	15.5	13.5	14.5
6	.5	.0	.0	1.5	.0	.5	7.5	5.0	6.0	16.0	12.5	14.0
7	.5	.0	.0	3.5	.5	1.0	8.0	6.0	7.0	16.0	14.0	15.0
8	.5	.0	.0	.5	.5	.5	9.0	7.5	8.0	15.0	13.5	14.0
9	.5	.0	.0	1.0	.0	.5	8.5	8.0	8.0	13.5	12.0	12.5
10	.5	.0	.0	1.0	.0	.5	8.5	8.0	8.0	14.0	10.5	12.5
11	.5	.0	.0	1.0	.0	.5	9.0	7.5	8.0	13.5	12.5	13.0
12	.5	.0	.0	.5	.0	.5	9.0	7.5	8.0	14.0	12.0	13.0
13	.5	.0	.0	.0	.0	.0	10.0	8.0	9.0	15.5	13.5	14.5
14	.5	.0	.0	2.0	.0	.5	9.5	7.5	8.5	17.0	14.5	16.0
15	.5	.0	.0	1.5	.0	.5	8.5	7.0	8.0	15.5	14.5	15.0
16	.0	.0	.0	7.0	.0	2.0	8.0	6.5	7.5	16.5	12.5	15.0
17	.0	.0	.0	2.5	.5	1.5	7.5	5.5	6.5	17.0	14.0	16.0
18	.5	.0	.0	2.0	.5	1.5	8.0	6.0	7.0	16.5	15.0	15.5
19	.5	.0	.0	2.0	.0	1.0	9.5	6.5	8.0	17.5	15.0	16.0
20	.5	.0	.5	2.5	1.0	1.5	10.0	8.0	9.0	19.0	16.0	17.5
21	.0	.0	.0	2.5	1.0	2.0	11.5	9.5	10.0	18.0	17.0	17.5
22	.5	.0	.5	1.5	1.0	1.5	11.5	9.0	10.0	19.5	16.0	18.0
23	2.5	.0	1.0	3.0	1.5	2.0	12.0	8.5	10.5	21.0	17.5	19.5
24	.5	.0	.5	3.5	2.5	3.0	13.5	9.5	11.5	22.5	19.0	21.0
25	.0	.0	.0	3.5	3.0	3.0	12.5	11.0	11.5	23.5	19.5	21.0
26	.5	.0	.0	3.0	2.5	3.0	13.0	10.5	12.0	21.5	17.0	19.0
27	.5	.0	.0	5.0	2.5	3.5	12.5	11.0	11.5	20.5	15.0	17.5
28	.5	.0	.0	5.0	3.5	4.0	11.0	9.0	10.0	21.5	14.0	18.0
29	.5	.0	.5	5.0	4.5	4.5	9.0	9.0	9.0	24.5	16.5	20.0
30	---	---	---	4.5	4.0	4.0	10.0	9.0	9.5	21.5	17.5	19.5
31	---	---	---	4.0	3.5	4.0	---	---	---	23.5	19.0	20.5
MONTH	2.5	.0	.0	7.0	.0	1.5	13.5	3.0	8.5	24.5	10.0	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.0	20.0	22.0	21.5	17.5	19.5	28.0	23.0	25.0	25.0	23.0	24.0
2	24.0	21.0	22.0	20.5	19.5	20.0	28.0	24.0	25.5	26.5	23.0	24.5
3	23.5	20.5	21.5	21.5	19.5	20.5	26.0	24.0	25.0	26.5	22.0	24.5
4	22.0	18.5	20.5	25.5	19.5	22.5	25.5	22.5	24.0	25.5	22.0	24.0
5	23.5	17.0	20.0	25.0	21.5	23.0	26.0	22.5	24.0	25.0	22.5	23.5
6	23.5	18.0	20.5	24.5	21.5	23.0	27.0	23.0	24.5	24.5	22.0	23.5
7	20.5	19.5	20.0	23.0	20.0	21.5	28.0	23.0	25.0	23.0	21.5	22.5
8	21.0	16.5	19.0	23.5	20.5	21.5	29.0	23.5	26.0	23.0	20.0	21.5
9	16.5	14.5	15.0	26.0	20.5	22.5	29.5	23.5	26.5	23.5	18.5	21.0
10	17.5	13.0	15.0	27.0	21.0	23.5	28.5	25.0	26.5	23.5	20.0	21.5
11	17.5	13.5	15.0	25.0	21.0	22.5	28.0	24.0	26.0	23.0	18.5	20.5
12	21.5	13.0	16.5	26.5	21.5	24.0	26.5	22.0	24.5	21.5	19.0	20.5
13	24.0	13.5	18.0	28.5	19.5	23.5	28.0	20.5	23.5	21.5	19.5	20.5
14	25.0	14.0	19.5	26.5	21.5	23.5	23.5	20.0	22.0	22.0	20.5	21.0
15	25.0	20.0	22.5	---	---	---	26.5	21.0	23.0	21.0	19.0	20.0
16	24.5	20.0	21.5	---	---	---	22.5	21.0	21.5	20.5	16.5	18.5
17	24.0	16.0	20.0	---	---	---	24.0	20.0	22.0	20.0	18.5	19.0
18	24.0	17.5	20.0	30.0	22.0	25.5	24.0	20.5	21.5	20.0	18.5	19.5
19	25.0	18.0	20.5	31.0	26.0	28.0	25.0	20.0	22.0	20.5	17.0	19.0
20	20.5	18.0	19.0	32.0	26.0	28.5	24.5	21.5	23.0	20.0	18.0	19.0
21	21.5	16.0	18.5	32.0	23.0	26.0	24.5	21.5	22.5	21.5	19.0	20.0
22	22.5	18.0	20.0	28.5	23.5	25.5	24.0	20.5	22.0	24.0	20.0	22.0
23	23.5	19.0	21.0	28.5	22.5	25.0	24.5	21.0	22.5	23.5	21.5	22.0
24	26.5	19.0	22.5	28.5	21.0	24.5	25.0	22.0	23.5	23.5	17.0	20.0
25	26.5	21.5	24.0	29.5	22.5	25.0	26.0	22.5	24.0	20.0	18.0	18.5
26	26.5	22.5	24.5	28.5	25.5	27.0	26.0	22.0	24.0	20.0	18.0	19.0
27	26.5	22.0	24.0	28.5	24.5	26.5	27.0	22.5	24.5	18.5	14.5	16.5
28	25.0	21.5	23.0	27.5	23.5	25.5	26.5	23.5	25.0	16.0	14.5	15.5
29	22.0	20.5	21.5	27.0	22.0	24.5	26.0	23.5	24.5	17.0	14.5	15.5
30	21.0	19.0	20.0	28.5	23.5	25.5	25.5	23.5	24.5	18.5	16.5	17.0
31	---	---	---	27.5	22.5	25.5	25.0	23.5	24.0	---	---	---
MONTH	26.5	13.0	20.0	32.0	17.5	24.0	29.5	20.0	24.0	26.5	14.5	20.5

01432805 DELAWARE RIVER AT POND EDDY, NY

LOCATION.--Lat 41°26'20", long 74°49'11", Pike County, Pa. Hydrologic Unit 02040104, at interstate bridge, at Pond Eddy, 450 ft (137 m) downstream from Mill Brook and 4.5 mi (7.2 km) upstream from Mongaup River.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1973.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record Apr. 14 to May 28, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1976, 1978, 1980) 31.0°C July 21, 1980; minimum (water years 1974, 1977-78, 1980), freezing point on many days during winter periods, except 1978 and 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum 31.0°C July 21; minimum, 0.5°C on many days during winter periods.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	16.0	16.5	8.0	7.5	7.5	5.5	4.0	5.0	1.5	1.5	1.5
2	16.5	16.0	16.0	10.5	8.0	9.5	4.0	3.0	3.5	1.5	1.0	1.0
3	16.5	16.0	16.0	10.5	9.5	10.0	3.0	2.5	2.5	1.0	.5	1.0
4	16.5	15.5	16.0	9.5	8.5	9.0	3.0	2.5	2.5	.5	.5	.5
5	16.5	16.0	16.0	8.5	7.5	8.0	3.5	3.0	3.0	.5	.5	.5
6	16.0	14.5	15.0	7.5	7.0	7.5	4.0	3.5	3.5	.5	.5	.5
7	14.5	13.0	14.0	7.0	7.0	7.0	4.5	4.5	4.5	.5	.5	.5
8	13.0	12.0	12.5	7.0	7.0	7.0	4.5	4.0	4.5	.5	.5	.5
9	12.0	12.0	12.0	7.5	7.0	7.5	4.0	3.0	3.5	.5	.5	.5
10	12.0	10.5	11.0	8.0	7.5	8.0	3.0	3.0	3.0	.5	.5	.5
11	10.5	10.0	10.0	8.0	8.0	8.0	3.5	3.0	3.0	.5	.5	.5
12	10.0	9.5	10.0	8.0	8.0	8.0	4.5	3.5	4.0	.5	.5	.5
13	10.0	10.0	10.0	8.0	8.0	8.0	5.0	4.5	5.0	.5	.5	.5
14	9.5	9.0	9.0	8.0	7.5	8.0	5.0	4.0	4.5	.5	.5	.5
15	9.0	8.5	8.5	7.5	6.5	6.5	4.0	2.5	3.0	.5	.5	.5
16	10.0	9.5	9.5	6.5	5.0	6.0	2.0	2.0	2.0	.5	.5	.5
17	10.5	10.0	10.0	5.0	4.5	5.0	2.0	1.0	1.5	.5	.5	.5
18	11.5	10.0	11.0	5.0	5.0	5.0	1.0	1.0	1.0	1.0	.5	.5
19	12.0	11.5	12.0	5.5	5.0	5.5	1.0	1.0	1.0	1.0	1.0	1.0
20	14.0	12.0	13.0	6.5	5.5	6.0	1.0	1.0	1.0	1.0	.5	1.0
21	15.5	13.5	14.5	7.0	6.5	6.5	1.0	1.0	1.0	.5	.5	.5
22	16.5	15.0	15.5	7.0	7.0	7.0	1.0	1.0	1.0	.5	.5	.5
23	16.5	15.5	16.0	8.0	7.0	7.5	1.0	1.0	1.0	.5	.5	.5
24	16.5	14.0	15.5	9.5	8.0	9.0	1.5	1.0	1.0	.5	.5	.5
25	14.0	12.0	13.0	10.5	9.5	10.0	2.5	1.5	2.0	.5	.5	.5
26	12.0	10.5	11.5	12.0	10.5	11.5	2.5	2.5	2.5	.5	.5	.5
27	10.5	8.5	9.5	12.0	10.5	11.5	2.5	2.5	2.5	.5	.5	.5
28	8.5	7.5	8.0	10.5	9.0	9.5	2.5	2.5	2.5	.5	.5	.5
29	7.5	7.5	7.5	9.0	7.0	7.5	2.5	2.5	2.5	.5	.5	.5
30	7.5	7.5	7.5	7.0	5.5	6.0	2.5	2.5	2.5	.5	.5	.5
31	8.0	7.0	7.5	---	---	---	2.5	1.5	2.0	.5	.5	.5
MONTH	17.0	7.0	12.0	12.0	4.5	8.0	5.5	1.0	2.5	1.5	.5	.5

01432805 DELAWARE RIVER AT POND EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	.5	.5	.5	4.5	3.5	4.0	---	---	---
2	.5	.5	.5	.5	.5	.5	4.5	4.5	4.5	---	---	---
3	.5	.5	.5	.5	.5	.5	5.5	4.5	5.0	---	---	---
4	.5	.5	.5	.5	.5	.5	6.0	5.5	5.5	---	---	---
5	.5	.5	.5	.5	.5	.5	6.0	5.5	6.0	---	---	---
6	.5	.5	.5	.5	.5	.5	7.0	5.5	6.0	---	---	---
7	.5	.5	.5	.5	.5	.5	7.5	6.5	7.0	---	---	---
8	.5	.5	.5	.5	.5	.5	7.5	7.5	7.5	---	---	---
9	.5	.5	.5	.5	.5	.5	8.0	7.5	8.0	---	---	---
10	.5	.5	.5	.5	.5	.5	8.5	8.0	8.0	---	---	---
11	.5	.5	.5	.5	.5	.5	8.5	7.5	8.0	---	---	---
12	.5	.5	.5	.5	.5	.5	8.5	8.0	8.0	---	---	---
13	.5	.5	.5	.5	.5	.5	9.0	8.5	9.0	---	---	---
14	.5	.5	.5	.5	.5	.5	---	---	---	---	---	---
15	.5	.5	.5	.5	.5	.5	---	---	---	---	---	---
16	.5	.5	.5	.5	.5	.5	---	---	---	---	---	---
17	.5	.5	.5	.5	.5	.5	---	---	---	---	---	---
18	.5	.5	.5	.5	.5	.5	---	---	---	---	---	---
19	.5	.5	.5	.5	.5	.5	---	---	---	---	---	---
20	.5	.5	.5	1.0	.5	1.0	---	---	---	---	---	---
21	.5	.5	.5	1.5	1.0	1.5	---	---	---	---	---	---
22	.5	.5	.5	1.0	1.0	1.0	---	---	---	---	---	---
23	.5	.5	.5	2.5	1.0	1.5	---	---	---	---	---	---
24	.5	.5	.5	3.0	2.5	2.5	---	---	---	---	---	---
25	.5	.5	.5	3.0	3.0	3.0	---	---	---	---	---	---
26	.5	.5	.5	3.0	3.0	3.0	---	---	---	---	---	---
27	.5	.5	.5	4.0	2.5	3.0	---	---	---	---	---	---
28	.5	.5	.5	4.0	4.0	4.0	---	---	---	---	---	---
29	.5	.5	.5	4.0	4.0	4.0	---	---	---	23.0	18.0	20.0
30	---	---	---	4.0	4.0	4.0	---	---	---	21.0	19.5	20.0
31	---	---	---	4.0	3.5	4.0	---	---	---	22.0	19.0	20.5
MONTH	.5	.5	.5	4.0	.5	1.5						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	20.5	22.0	21.0	19.0	20.0	27.0	24.5	25.5	25.5	23.5	24.5
2	23.5	22.0	22.5	21.0	20.5	20.5	26.0	24.0	25.0	26.5	23.5	25.0
3	23.5	21.0	22.0	21.0	20.5	20.5	26.5	24.0	25.0	26.5	23.0	24.5
4	22.5	20.5	21.5	25.0	20.5	22.0	27.0	24.5	25.5	25.5	23.0	24.0
5	23.0	18.5	20.5	25.0	22.0	23.5	26.0	23.0	24.5	24.5	23.5	24.0
6	22.5	19.0	20.5	25.0	22.0	23.5	26.0	23.0	24.5	26.0	22.5	24.0
7	20.5	20.0	20.5	24.5	21.5	22.5	27.5	23.5	25.5	24.0	22.0	23.0
8	20.5	18.5	20.0	23.5	21.0	22.0	28.0	24.5	26.0	23.0	21.0	22.0
9	18.0	15.5	16.5	25.5	21.0	23.0	28.0	24.5	26.0	22.5	20.0	21.0
10	16.0	14.5	15.0	26.0	22.5	24.0	28.5	25.0	26.5	23.0	20.5	21.5
11	17.0	15.0	15.5	25.5	22.5	24.0	27.5	25.5	26.5	23.0	19.5	21.0
12	19.5	14.5	16.5	25.5	22.0	23.5	26.5	25.0	25.5	22.0	20.0	20.5
13	22.5	16.0	18.5	26.5	22.5	24.5	26.0	23.0	24.5	22.0	20.0	20.5
14	23.5	18.0	20.5	28.0	23.0	25.0	24.0	22.5	23.0	22.0	20.5	21.0
15	24.5	20.5	22.0	25.5	22.5	24.0	24.5	22.0	23.0	21.5	19.5	20.5
16	24.0	21.5	22.5	27.5	23.0	24.5	23.0	21.5	22.0	19.0	18.0	18.5
17	23.5	19.0	21.0	27.0	23.5	25.0	24.0	20.0	22.0	20.0	18.5	19.0
18	23.0	19.5	21.0	29.0	24.0	26.0	23.0	21.0	22.0	20.0	19.0	19.5
19	24.0	19.5	21.5	28.0	25.0	26.5	24.0	21.0	22.0	21.0	18.0	19.0
20	22.0	19.5	20.5	30.0	26.0	27.5	23.5	22.0	22.5	20.5	19.0	19.5
21	21.5	18.0	19.5	31.0	27.0	28.5	22.5	22.0	22.5	22.0	19.0	20.0
22	23.0	19.0	20.5	28.0	25.0	26.0	23.0	22.0	22.5	24.0	21.0	22.0
23	24.5	20.0	21.5	26.5	25.0	26.0	24.5	21.5	22.5	24.0	22.0	23.0
24	24.5	20.5	22.5	27.0	23.0	25.0	25.0	22.0	23.5	22.0	20.0	21.0
25	26.5	23.0	24.5	27.5	23.0	25.0	26.0	22.5	24.0	20.0	18.5	19.0
26	26.5	24.0	25.0	27.5	23.0	25.5	26.0	23.0	24.0	20.5	18.0	18.5
27	27.0	24.0	25.0	28.5	25.5	26.5	27.0	23.5	25.0	18.5	16.5	17.5
28	24.5	23.0	24.0	27.0	25.0	26.0	26.5	24.5	25.0	17.0	15.0	16.0
29	23.0	21.5	22.0	26.0	24.5	25.0	26.0	24.5	25.0	16.0	15.0	15.5
30	22.0	20.5	21.0	26.5	23.5	25.0	26.0	24.5	25.0	19.0	15.5	17.0
31	---	---	---	27.0	24.0	25.0	25.5	24.0	24.5	---	---	---
MONTH	27.0	14.5	21.0	31.0	19.0	24.5	28.5	20.0	24.0	26.5	15.0	20.5

01433500 MONGAUP RIVER NEAR MONGAUP, NY

LOCATION.--Lat 41°27'41", long 74°45'33", Sullivan County, Hydrologic Unit 02040104, on right bank 300 ft (91 m) downstream from Rio hydroelectric plant of Orange and Rockland Utilities, Inc., 0.5 mi (0.8 km) downstream from Bush Kill, and 2.8 mi (4.5 km) upstream from mouth and Mongaup.

DRAINAGE AREA.--202 mi^2 (523 km^2).

PERIOD OF RECORD.--August 1939 to current year.

REVISED RECORDS.--WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 625.05 ft (190.515 m) Orange and Rockland Utilities, Inc. datum. Prior to July 6, 1956, water-stage recorders at sites 25 ft (8 m) upstream on Rio Tailrace and 200 ft (61 m) upstream on natural channel, at datum 4.0 ft (1.22 m) higher.

REMARKS.--Records fair. Flow regulated by hydroelectric plant upstream. Flow also regulated by storage in Cliff Lake, Swinging Bridge, and Toronto Reservoirs (see Reservoirs in Delaware River Basin) and small reservoirs above station.

AVERAGE DISCHARGE.--41 years, 341 ft^3/s (9.66 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft^3/s (450 m^3/s) Aug. 19, 1955; maximum daily, 12,300 ft^3/s (348 m^3/s), Aug. 19, 1955; minimum daily, 6 ft^3/s (0.17 m^3/s) Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,380 ft^3/s (67.4 m^3/s) Mar. 23, gage height, 6.77 ft (2.063 m); minimum daily, 32 ft^3/s (0.91 m^3/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	580	495	157	51	134	772	745	73	178	208	43
2	59	557	366	181	48	70	772	676	114	300	157	177
3	58	386	450	333	46	56	745	662	167	339	77	167
4	61	235	608	319	45	51	753	308	312	184	94	143
5	84	240	608	211	44	50	765	317	297	79	265	96
6	517	580	604	94	44	50	733	611	297	71	367	61
7	784	619	601	132	43	48	699	604	371	162	340	49
8	726	608	286	324	43	58	662	455	250	283	295	42
9	604	461	122	282	42	64	749	280	163	334	165	38
10	352	157	251	169	42	56	937	201	312	346	63	37
11	436	127	567	90	41	58	846	99	429	327	152	63
12	604	240	584	86	41	143	749	229	293	291	321	132
13	633	413	587	68	40	280	733	418	211	160	334	103
14	324	271	591	90	40	306	714	391	130	243	317	58
15	251	129	580	117	43	222	726	345	74	350	350	46
16	550	153	240	117	153	109	718	263	137	380	168	39
17	598	250	250	211	111	169	680	154	310	332	64	36
18	598	140	284	208	78	408	665	111	317	367	179	41
19	293	103	553	96	63	328	651	180	293	178	161	39
20	145	187	413	71	55	368	640	259	304	76	67	36
21	113	391	295	61	51	324	626	253	250	190	51	35
22	125	251	229	145	72	1630	587	257	201	530	43	72
23	312	160	141	324	178	1810	383	222	81	315	40	98
24	587	216	108	328	113	1250	604	145	56	325	37	52
25	580	118	130	326	78	1220	611	93	48	340	97	44
26	577	328	148	206	64	1260	299	72	44	190	270	44
27	250	873	127	87	55	1080	127	59	44	74	268	41
28	114	784	112	65	51	757	306	51	40	55	265	34
29	246	714	93	56	80	776	726	65	44	48	149	32
30	553	654	86	51	---	809	741	161	76	159	64	32
31	580	---	116	48	---	784	---	88	---	156	50	---
TOTAL	11764	10925	10625	5053	1855	14728	19719	8774	5738	7362	5478	1930
MEAN	379	364	343	163	64.0	475	657	283	191	237	177	64.3
MAX	784	873	608	333	178	1810	937	745	429	530	367	177
MIN	50	103	86	48	40	48	127	51	40	48	37	32

CAL YR 1979 TOTAL 162397 MEAN 445 MAX 2420 MIN 20
WTR YR 1980 TOTAL 103951 MEAN 284 MAX 1810 MIN 32

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., Hydrologic Unit 02040104, on right bank 250 ft (76 m) downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,076 mi^2 (7,967 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft (126.599 m) National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see Reservoirs in Delaware River Basin) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi^2 (961 km^2) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft^3/s (6,600 m^3/s) Aug. 19, 1955, gage height, 23.91 ft (7.288 m), from floodmarks in gage house, from rating curve extended above 89,000 ft^3/s (2,520 m^3/s) on basis of slope-area measurement of peak flow; minimum observed, 175 ft^3/s (4.96 m^3/s) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft^3/s (5,810 m^3/s) Oct. 10, 1903, gage height, 23.1 ft (7.04 m), from rating curve extended above 70,000 ft^3/s (1,980 m^3/s) by velocity-area studies; stage on Mar. 8, 1904, was 25.5 ft (7.77 m), ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 73,400 ft^3/s (2,080 m^3/s) Mar. 22, gage height, 12.28 ft (3.743 m); minimum, 869 ft^3/s (24.6 m^3/s) Jan. 31, gage height, 1.78 ft (0.543 m); minimum daily, 1,110 ft^3/s (31.4 m^3/s) May 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2550	2260	7500	3510	2010	2200	15300	14500	1430	3350	1520	1840
2	6370	2230	6290	2990	2100	1500	14600	12500	1640	2550	1820	1650
3	6250	6260	6190	3600	1410	1400	13300	10900	1800	2230	1970	1640
4	7020	11100	6410	3340	1620	2200	13000	8840	1890	1880	2250	1680
5	6690	7780	6000	2800	1800	1810	14200	7220	1460	1350	2740	1720
6	10100	6410	5540	1900	1700	1660	12100	7090	1640	1430	2560	1740
7	10500	5450	4620	1980	1800	1460	10500	7480	1860	1960	2280	1830
8	8080	4810	3720	2740	1600	1710	8970	5290	1870	2280	2190	1550
9	7190	4200	3030	2780	1800	3000	9590	4330	1610	2060	2040	1510
10	6930	3520	3240	2660	1600	3840	20500	3330	2010	2010	1420	1580
11	6590	3480	3730	2630	1400	2950	20200	3280	2270	2030	1510	1550
12	5920	3440	3650	2790	1600	2650	15200	4370	1930	1730	1650	1700
13	5310	3330	3470	2700	1600	2320	13000	3670	1570	1740	1650	1860
14	4290	3030	3840	2770	1400	2460	12600	3700	1400	1530	1710	1710
15	3930	2680	3410	2690	1500	1500	16000	3260	1560	1940	1790	1690
16	4540	2540	2620	2510	1800	1270	16700	2740	1500	1980	1810	1740
17	4450	2630	2680	2520	1500	1720	14200	2290	1860	2070	1630	1860
18	4250	2360	3460	2910	1500	4640	12400	2120	1730	1850	1370	1920
19	3740	2240	3570	2450	1400	12200	10300	2530	1700	1480	1520	2080
20	3040	2270	2970	1830	1600	8770	8470	2370	1660	1350	1270	1930
21	2050	2410	2990	1750	1800	12600	7800	2290	1630	1490	1440	1690
22	2230	2200	2970	2080	1400	59100	7780	2190	1830	2280	1430	1670
23	3180	1960	2220	2380	1900	25500	6720	2000	1640	1880	1640	1830
24	3600	2050	2160	2180	1400	15500	6180	1770	1680	1950	1580	1620
25	4310	2030	3270	2330	1180	14800	5680	1550	1680	1750	1530	1720
26	4450	4290	6820	2080	1300	13400	5170	1390	1760	1720	1850	1700
27	2790	28700	6110	1770	1400	10600	3590	1370	1620	1540	1850	1640
28	2060	18200	5130	1910	1700	9900	3540	1260	1680	1330	1890	1690
29	2230	11900	4280	1650	1600	11100	8070	1110	1730	1280	1850	1550
30	2540	9240	3380	1440	---	15500	14500	1240	2450	1240	1900	1780
31	2410	---	3460	1510	---	15700	---	1400	---	1780	1920	---
TOTAL	149590	165000	128730	75180	46420	264960	340160	129380	52090	57040	55580	51670
MEAN	4825	5500	4153	2425	1601	8547	11340	4174	1736	1840	1793	1722
MAX	10500	28700	7500	3600	2100	59100	20500	14500	2450	3350	2740	2080
MIN	2050	1960	2160	1440	1180	1270	3540	1110	1400	1240	1270	1510

CAL YR 1979 TOTAL 2204670 MEAN 6040 MAX 63000 MIN 1210
WTR YR 1980 TOTAL 1515800 MEAN 4142 MAX 59100 MIN 1110

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.
CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d).
MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c).
PESTICIDE DATA: 1974 (a).
ORGANIC DATA: OC--1974 (b), 1975 (d).
NUTRIENT DATA: 1968 (a), 1969-76 (d).
BIOLOGICAL DATA:
  Bacteria--1973-76 (d).
  Phytoplankton--1974 (b), 1975-76 (c).
  Periphyton--1976 (a).
SEDIMENT DATA: 1959 (c), 1976 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1973 to September 1973.
WATER TEMPERATURES: February 1957 to September 1960, January 1973 to September 1973, June 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

INSTRUMENTATION.--Temperature recorder since January 1973.

REMARKS.--No temperature record May 23-27, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1957-59, 1973-80), 29.5°C July 19, 1959, Aug. 3, 1975; minimum (water years 1958-60, 1973, 1975-80), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C July 21; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	16.0	16.5	8.5	7.0	8.0	4.5	3.5	4.0	1.5	.0	1.0
2	16.5	15.5	16.0	10.5	8.5	9.5	3.5	2.0	2.5	1.0	.0	.5
3	16.5	16.0	16.5	10.5	8.5	9.5	2.0	1.5	2.0	1.0	.0	.5
4	16.0	15.5	16.0	8.5	7.5	8.0	3.0	1.5	2.5	.5	.0	.0
5	16.0	15.5	16.0	7.5	6.5	7.0	3.5	2.5	3.0	.5	.0	.0
6	15.5	14.5	14.5	7.0	6.5	6.5	4.0	3.0	3.5	1.0	.0	.0
7	14.5	13.0	13.5	7.0	6.5	7.0	4.5	3.5	4.0	.0	.0	.0
8	14.0	12.0	12.5	7.0	6.5	6.5	4.5	3.0	4.0	.5	.0	.0
9	12.5	11.5	12.0	7.5	6.5	7.0	3.0	2.0	2.5	.5	.0	.0
10	11.5	10.0	11.0	8.0	7.5	8.0	2.5	2.0	2.5	.5	.0	.0
11	10.0	9.5	10.0	8.0	7.5	7.5	5.0	2.5	3.0	.5	.0	.0
12	10.0	9.5	10.0	8.0	7.5	7.5	4.5	3.0	4.0	.5	.0	.0
13	11.0	9.5	10.0	7.5	7.5	7.5	4.5	4.0	4.5	.5	.0	.0
14	10.0	8.5	9.0	7.5	6.5	7.5	4.0	3.0	3.5	.0	.0	.0
15	9.0	8.0	8.5	6.5	5.5	6.0	2.5	2.0	2.5	1.0	.0	.5
16	10.5	8.5	9.5	5.5	4.0	5.0	2.0	1.0	2.0	1.0	.0	.5
17	10.5	9.5	10.0	5.0	3.5	4.5	2.0	.0	1.0	1.0	.0	.5
18	12.0	9.5	11.0	5.5	4.0	4.5	.5	.0	.0	1.5	.5	1.0
19	12.5	11.0	11.5	5.5	4.0	5.0	.5	.0	.0	1.5	1.0	1.5
20	13.5	11.5	12.5	6.0	4.5	5.5	.0	.0	.0	1.5	.5	1.0
21	15.0	13.0	14.0	6.5	5.5	6.0	.5	.0	.0	1.0	.0	.5
22	16.0	14.0	15.0	7.0	6.5	6.5	1.0	.0	.5	.0	.0	.0
23	16.0	15.0	15.5	7.5	6.5	7.0	1.5	1.0	1.5	1.0	.0	.5
24	15.5	13.5	14.5	9.0	7.5	8.5	1.5	1.5	1.5	1.0	.0	.0
25	13.5	11.5	12.5	10.0	9.0	9.5	3.0	1.5	2.5	.5	.0	.0
26	11.5	10.0	11.0	12.0	10.0	11.0	2.5	2.0	2.0	.5	.0	.0
27	10.0	8.0	9.0	11.0	10.0	10.5	2.0	1.5	2.0	.5	.0	.0
28	8.0	7.0	7.5	10.0	8.0	8.5	2.0	1.5	1.5	.5	.0	.0
29	7.5	7.0	7.0	8.0	6.0	7.0	2.5	2.0	2.0	.0	.0	.0
30	8.0	7.5	7.5	6.0	4.0	5.0	2.0	1.5	2.0	.5	.0	.0
31	8.0	7.0	7.5	---	---	---	1.5	1.0	1.0	.5	.0	.0
MONTH	17.0	7.0	12.0	12.0	3.5	7.0	5.0	.0	2.0	1.5	.0	.5

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	4.5	3.0	4.0	12.0	10.0	11.0
2	.5	.0	.0	.0	.0	.0	5.5	4.0	4.5	13.0	11.5	12.0
3	.0	.0	.0	.0	.0	.0	5.5	4.0	5.0	14.0	12.0	13.0
4	.0	.0	.0	.0	.0	.0	6.0	5.5	5.5	15.0	13.5	14.0
5	.0	.0	.0	.0	.0	.0	6.0	5.5	6.0	15.5	13.5	14.5
6	.0	.0	.0	.5	.0	.0	6.5	5.5	6.0	15.0	14.0	14.5
7	.0	.0	.0	.5	.0	.0	7.5	6.0	7.0	16.0	14.5	15.5
8	.5	.0	.0	.0	.0	.0	8.0	7.0	7.5	15.0	14.0	14.5
9	.0	.0	.0	.5	.0	.0	8.0	8.0	8.0	14.5	12.5	13.5
10	.0	.0	.0	.5	.0	.0	8.5	8.0	8.0	14.0	11.5	13.0
11	.0	.0	.0	.5	.0	.0	8.5	7.5	8.0	13.0	12.5	13.0
12	.0	.0	.0	.5	.0	.0	3.5	7.5	8.0	14.0	12.5	13.5
13	.5	.0	.0	.0	.0	.0	9.0	8.0	8.5	15.0	13.5	14.5
14	.0	.0	.0	.0	.0	.0	9.0	7.5	8.5	16.5	14.0	15.5
15	.0	.0	.0	1.0	.0	.5	8.0	7.5	7.5	17.0	14.5	15.5
16	.0	.0	.0	2.0	.0	1.0	8.0	6.5	7.5	16.5	13.5	15.0
17	.5	.0	.0	3.0	.5	1.0	6.5	5.5	6.0	17.5	14.0	16.0
18	.0	.0	.0	2.0	.5	1.5	7.5	6.0	6.5	16.5	15.5	15.5
19	.0	.0	.0	1.0	.0	.5	8.5	6.5	7.5	17.5	15.0	16.5
20	.0	.0	.0	2.0	.5	1.0	9.5	8.0	9.0	18.5	16.0	17.5
21	.0	.0	.0	2.5	1.0	2.0	11.0	9.0	10.0	17.5	16.5	17.0
22	.0	.0	.0	1.5	.5	1.0	11.0	9.0	10.0	19.0	16.0	17.5
23	.0	.0	.0	2.5	1.0	2.0	11.5	9.5	10.5	---	---	---
24	.0	.0	.0	3.0	2.0	2.5	12.5	10.5	11.5	---	---	---
25	.0	.0	.0	3.0	3.0	3.0	12.0	11.5	12.0	---	---	---
26	.0	.0	.0	3.0	2.5	3.0	12.5	11.5	12.0	---	---	---
27	.0	.0	.0	4.0	2.5	3.0	12.0	11.0	11.5	---	---	---
28	.0	.0	.0	4.5	3.5	4.0	11.0	9.5	10.5	20.5	17.0	19.0
29	.0	.0	.0	4.5	4.5	4.5	9.5	9.0	9.0	21.5	18.0	19.5
30	---	---	---	4.5	4.0	4.0	10.0	9.0	9.5	20.0	19.0	19.5
31	---	---	---	4.0	3.5	4.0	---	---	---	21.0	19.0	20.0
MONTH	.5	.0	.0	4.5	.0	1.0	12.5	3.0	8.0	21.5	10.0	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.5	20.0	21.5	21.0	19.0	20.0	25.0	23.5	24.5	24.0	22.5	23.5
2	23.0	21.5	22.0	20.5	19.5	20.0	26.0	23.5	24.5	24.5	23.0	24.0
3	23.0	21.0	22.0	20.5	19.5	20.0	25.5	23.5	24.5	24.0	22.5	23.5
4	21.5	20.0	21.0	23.0	19.5	21.0	26.0	24.0	25.0	23.5	22.0	23.0
5	22.0	19.0	20.5	22.5	21.0	22.0	25.5	23.5	24.5	23.5	22.0	22.5
6	21.5	19.0	20.5	23.0	21.0	22.0	24.5	23.0	24.0	23.5	21.5	22.5
7	21.0	19.5	20.0	23.0	20.0	21.5	25.5	23.0	24.5	23.0	21.5	22.0
8	21.0	18.5	20.0	22.0	20.5	21.0	26.0	24.0	25.0	21.5	20.0	21.0
9	18.5	16.0	17.0	23.5	20.0	22.0	26.0	25.0	25.5	20.5	19.5	20.0
10	16.5	15.0	16.0	24.5	21.5	23.0	25.5	24.0	25.0	21.0	20.0	20.5
11	16.5	15.0	16.0	24.0	21.5	23.0	26.0	25.0	25.5	20.5	19.0	20.0
12	18.5	14.5	17.0	24.0	21.5	23.0	25.5	24.5	25.0	20.0	19.0	19.5
13	20.0	16.5	18.5	24.0	21.0	22.5	25.0	23.0	24.0	20.0	19.0	19.5
14	21.5	18.0	20.0	25.0	22.0	23.5	24.0	22.5	23.0	20.5	19.5	20.0
15	23.0	20.5	22.0	24.5	22.5	23.5	23.0	22.0	22.5	20.5	18.5	19.5
16	23.0	21.0	22.0	25.0	22.0	23.5	22.5	21.5	22.0	18.5	17.0	18.0
17	23.0	20.0	21.5	25.5	23.0	24.5	22.5	20.5	21.5	19.0	17.0	17.5
18	22.0	19.5	21.0	26.5	23.0	24.5	22.0	21.0	22.0	18.5	18.0	18.5
19	23.0	19.0	21.0	26.0	23.5	25.0	21.5	21.0	21.5	18.5	17.0	18.0
20	22.0	19.0	20.0	27.0	24.5	26.0	22.0	21.0	21.5	19.0	17.5	18.0
21	21.5	18.0	19.5	28.0	26.0	27.0	21.5	20.5	21.0	20.0	18.5	19.5
22	21.5	18.5	20.0	27.5	24.5	26.0	21.5	20.5	21.0	21.5	19.5	20.5
23	22.5	20.0	21.5	25.5	23.5	24.5	22.5	20.5	21.5	21.5	20.5	21.0
24	24.0	20.5	22.5	25.5	23.0	24.5	22.5	21.0	22.0	20.5	19.0	19.5
25	25.0	22.0	23.5	25.5	22.5	24.0	23.5	21.5	22.5	19.0	17.0	18.0
26	26.0	23.0	24.5	25.5	23.0	24.5	24.0	22.0	23.0	17.5	17.0	17.0
27	26.0	23.0	24.5	26.5	24.0	25.0	24.5	22.5	23.5	17.0	15.5	16.0
28	24.5	22.5	24.0	26.0	24.5	25.0	24.5	23.0	24.0	15.5	14.5	15.0
29	23.0	21.5	22.0	25.0	24.0	24.5	24.5	23.0	24.0	15.5	14.0	14.5
30	22.0	20.5	21.5	25.0	23.5	24.5	24.5	23.0	24.0	16.5	14.5	15.0
31	---	---	---	25.0	23.0	24.0	24.5	23.0	24.0	---	---	---
MONTH	26.0	14.5	21.0	28.0	19.0	23.5	26.0	20.5	23.5	24.5	14.0	19.5

01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY

LOCATION.--Lat 41°53'24", long 74°35'25", Sullivan County, Hydrologic Unit 02040104, on left bank 50 ft (15 m) downstream from covered bridge, 300 ft (91 m) upstream from small tributary, 2.2 mi (3.5 km) downstream from confluence of East and West Branches, and 2.2 mi (3.5 km) southwest of Claryville.

DRAINAGE AREA.--65.6 mi^2 (170 km^2).

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,522.37 ft (464.018 m) National Geodetic Vertical Datum of 1929. Prior to October 1, 1974, at datum 6.00 ft (1.829 m) higher. Oct. 1, 1974 to Sept. 30, 1979 at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--29 years, 191 ft^3/s (5.409 m^3/s), 39.54 in/yr (1,000 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft^3/s (442 m^3/s) Mar. 21, 1980, maximum gage height, 13.83 ft (4.215 m) present datum, July 10, 1952; minimum discharge, 6.8 ft^3/s (0.19 m^3/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 25, 1950, reached a stage of about 15.0 ft (4.57 m) present datum, from floodmarks, discharge, 23,400 ft^3/s (663 m^3/s) by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85 m^3/s), and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	1600	6,450	183	10.52	3.206	Mar. 21	1715	*15,600	442	*12.66	3.859
Mar. 18	0730	3,110	88.1	9.18	2.798	Apr. 9	1600	4,580	130	9.85	3.002

Minimum discharge, 13 ft^3/s (0.37 m^3/s) Sept. 24, 25, 30, gage height, 4.80 ft (1.463 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	503	126	277	130	76	40	332	312	73	131	38	23
2	473	141	248	131	70	39	308	270	72	87	48	23
3	378	535	218	115	64	38	274	238	70	76	72	22
4	365	304	206	100	62	37	519	212	68	69	61	21
5	835	245	194	100	58	40	478	193	63	63	50	22
6	1260	228	179	100	56	50	332	182	61	141	45	34
7	579	212	179	98	54	90	308	185	89	82	42	28
8	453	196	168	98	52	510	304	162	73	71	39	23
9	557	188	146	98	50	350	1700	151	67	68	36	21
10	458	259	146	101	48	190	1850	139	68	63	35	21
11	383	225	144	129	47	150	704	134	61	60	34	19
12	438	200	139	285	46	130	483	134	58	59	36	19
13	429	190	139	140	45	120	478	126	56	55	36	17
14	348	188	129	136	44	110	429	134	54	53	33	17
15	316	182	119	129	44	120	886	115	58	52	37	17
16	285	173	119	115	43	150	519	104	79	51	36	16
17	263	167	151	108	43	200	378	100	58	50	33	15
18	245	170	110	108	43	1720	320	141	53	49	31	25
19	222	165	104	106	43	429	277	179	50	46	30	23
20	209	146	100	104	43	312	245	129	53	45	30	19
21	200	144	100	100	42	4560	218	115	53	44	29	18
22	185	139	100	100	42	2660	196	111	49	102	28	16
23	170	134	108	100	42	625	200	100	47	63	28	15
24	190	149	129	94	42	438	167	95	45	54	28	13
25	173	215	324	88	42	374	157	90	44	48	26	13
26	157	1940	245	86	41	277	149	86	42	45	25	19
27	149	1210	190	84	41	235	149	83	41	43	24	19
28	149	546	167	82	40	245	340	81	39	42	24	15
29	149	415	159	78	40	419	749	74	144	41	23	14
30	136	624	154	76	---	546	405	73	434	43	23	13
31	129	---	140	82	---	429	---	73	---	40	23	---
TOTAL	10786	9756	5031	3401	1403	15633	13854	4321	2222	1936	1083	580
MEAN	348	325	162	110	48.4	504	462	139	74.1	62.5	34.9	19.3
MAX	1260	1940	324	285	76	4560	1850	312	434	141	72	34
MIN	129	126	100	76	40	37	149	73	39	40	23	13

CAL YR 1979 TOTAL 95990 MEAN 263 MAX 3690 MIN 41
WTR YR 1980 TOTAL 70006 MEAN 191 MAX 4560 MIN 13

01436000 NEVERSINK RIVER AT NEVERSINK, NY

LOCATION.--Lat 41°49'12", long 74°38'09", Sullivan County, Hydrologic Unit 02040104, on right bank at downstream end of outlet channel, 1,650 ft (503 m) downstream from Neversink Dam and State Highway 55, 1.7 mi (2.7 km) southwest of Neversink, and 2.6 mi (4.2 km) upstream from Wynkoop Brook.

DRAINAGE AREA.--91.9 mi² (238 km²).

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WRD NY 1972: 1961 (M), 1968 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,255.24 ft (382.597 m) Board of Water Supply, City of New York datum. Prior to Jan. 17, 1953, water-stage recorder at site 650 ft (198 m) downstream at datum 0.20 ft (0.061 m) lower. Jan. 17, 1953 to Apr. 16, 1954, water-stage recorder at present site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records fair. Subsequent to June 1953, entire flow from 91.8 mi² (238 km²) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation release and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,300 ft³/s (632 m³/s) Nov. 25, 1950, from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of contracted-opening and critical-depth measurements of peak flow; maximum gage height, 11.65 ft (3.551 m) Sept. 27, 1942, site and datum then in use; no flow for all or part of each day Sept. 22-24, Oct. 26-29, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 325 ft³/s (9.204 m³/s) Apr. 16, gage height, 3.97 ft (1.210 m); minimum, 4.4 ft³/s (0.125 m³/s) Apr. 7, gage height, 2.47 ft (0.753 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	26	30	27	27	28	46	45	45	47	46	74
2	45	24	27	28	27	28	46	45	46	47	47	64
3	45	27	29	25	27	27	46	45	47	46	46	47
4	43	28	28	23	27	26	45	45	46	46	46	47
5	45	28	28	24	26	27	44	46	45	47	46	46
6	45	30	28	24	26	27	47	46	44	46	46	45
7	45	26	28	24	26	25	40	45	44	46	46	45
8	45	26	27	26	26	25	46	45	43	46	57	45
9	45	26	28	27	26	25	46	46	45	46	74	46
10	45	25	28	27	26	26	46	47	44	46	64	46
11	45	25	28	27	26	25	45	47	44	46	44	45
12	45	26	30	29	26	25	46	47	44	46	47	45
13	45	27	28	29	26	25	49	47	43	46	47	45
14	45	27	27	26	26	26	44	47	43	46	47	45
15	46	26	27	26	26	26	82	46	43	46	48	46
16	45	25	26	26	26	27	213	45	43	46	47	46
17	42	26	23	26	25	26	58	45	44	56	47	46
18	43	26	27	26	25	25	45	44	43	73	47	45
19	43	27	27	23	25	25	45	44	44	73	46	46
20	42	28	27	23	26	26	46	44	44	73	46	46
21	42	27	27	26	25	30	46	45	43	73	46	46
22	43	28	27	25	24	29	46	44	44	59	46	47
23	43	28	27	25	24	29	46	45	43	46	46	48
24	43	28	27	26	25	27	46	45	52	46	46	47
25	45	28	27	26	25	27	46	44	72	46	46	46
26	45	29	26	25	25	26	46	44	72	46	46	45
27	43	29	25	24	25	27	46	44	61	46	47	45
28	45	29	23	25	27	27	46	44	43	46	48	44
29	43	28	26	25	27	27	46	44	46	47	47	43
30	37	31	26	25	---	34	46	45	46	47	56	44
31	26	---	27	27	---	46	---	45	---	47	73	---
TOTAL	1344	814	839	795	748	849	1585	1400	1406	1563	1531	1415
MEAN	43.4	27.1	27.1	25.6	25.8	27.4	52.8	45.2	46.9	50.4	49.4	47.2
MAX	46	31	30	29	27	46	213	47	72	73	74	74
MIN	26	24	23	23	24	25	40	44	43	46	44	43

CAL YR 1979 TOTAL 13394 MEAN 36.7 MAX 66 MIN 16
WTR YR 1980 TOTAL 14289 MEAN 39.0 MAX 213 MIN 23

01436500 NEVERSINK RIVER AT WOODBOURNE, NY

LOCATION.--Lat 41°45'24", long 74°35'52", Sullivan County, Hydrologic Unit 02040104, on left bank 0.2 mi (0.3 km) downstream from highway bridge at Woodbourne, 0.3 mi (0.5 km) upstream from outlet of South Wind Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--113 mi^2 (293 km^3).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to September 1972, October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft (360 m), from topographic map. Prior to Sept. 20, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to June 1953, entire flow from 91.8 mi^2 (238 km^2) of drainage area controlled by Neversink Reservoir. Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES.--Maximum discharge, 22,000 ft^3/s (623 m^3/s) Nov. 26, 1950, gage height, 11.19 ft (3.411 m); maximum gage height, 11.2 ft (3.414 m) July 22, 1938, from floodmarks and graph based on gage readings; minimum discharge, 6.7 ft^3/s (0.19 m^3/s) June 27, 1953; minimum daily, 8.2 ft^3/s (0.23 m^3/s) June 25, 1953; minimum gage height, 0.80 ft (0.244 m) Aug. 25, 27, 28, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,220 ft^3/s (62.8 m^3/s) Mar. 21, gage height, 5.33 ft (1.625 m); minimum daily discharge 31 ft^3/s (.878 m^3/s) Feb. 5-7; minimum gage height 1.36 ft (0.415 m) Aug. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	45	83	52	32	38	126	115	50	73	46	78
2	153	50	73	50	32	37	117	106	49	63	53	75
3	117	181	69	49	32	37	108	97	51	58	66	50
4	114	100	65	48	32	37	165	89	49	54	48	48
5	168	77	62	46	31	39	137	85	46	56	46	49
6	258	70	60	45	31	37	113	81	43	78	45	47
7	138	65	62	44	31	35	98	82	56	56	44	46
8	116	58	58	44	34	45	97	74	54	53	47	46
9	125	57	53	43	34	44	222	73	51	53	72	45
10	115	71	52	42	33	41	344	74	49	51	69	47
11	101	70	51	45	33	45	185	71	47	50	43	46
12	106	64	50	50	33	52	141	82	45	49	45	45
13	110	60	53	63	32	84	134	80	43	48	43	45
14	93	62	51	48	32	77	133	84	43	46	44	46
15	88	57	46	44	32	65	204	72	43	47	47	46
16	84	58	46	40	32	59	280	66	45	46	43	46
17	78	55	62	39	32	47	140	63	43	50	43	47
18	76	56	75	39	32	219	106	76	43	74	43	52
19	73	52	99	39	32	134	95	82	41	75	43	46
20	71	50	103	37	33	89	92	69	44	75	42	45
21	70	50	74	37	36	794	87	64	42	76	42	45
22	69	50	53	37	39	588	83	63	41	80	42	45
23	68	49	47	37	42	233	78	59	42	54	41	48
24	76	49	58	36	41	174	75	57	43	46	41	46
25	71	63	127	36	40	153	73	56	70	45	41	46
26	68	280	90	35	39	126	72	53	71	45	40	49
27	66	232	68	34	39	115	74	55	66	44	41	45
28	71	132	60	34	38	111	175	52	41	43	43	44
29	71	106	57	33	38	163	227	50	73	46	42	43
30	66	91	56	33	---	171	143	49	166	46	44	43
31	45	---	53	33	---	146	---	49	---	44	73	---
TOTAL	3086	2460	2016	1292	997	4035	4124	2228	1590	1724	1462	1449
MEAN	99.5	82.0	65.0	41.7	34.4	130	137	71.9	53.0	55.6	47.2	48.3
MAX	258	280	127	63	42	794	344	115	166	80	73	78
MIN	45	45	46	33	31	35	72	49	41	43	40	43

CAL YR 1979 TOTAL 33624 MEAN 92.1 MAX 675 MIN 31
WTR YR 1980 TOTAL 26463 MEAN 72.3 MAX 794 MIN 31

01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1965, 1972, 1978 to current year.
CHEMICAL DATA: 1964 (b), 1965 (c), 1972 (a).
NUTRIENT DATA: 1964 (b), 1965 (c), 1972 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July and August, 1978, May 1979 to current year.

INSTRUMENTATION.--Temperature recorder since October 1977.

REMARKS.--No record Dec. 3-12, July 31 to Aug. 11, due to instrument malfunctions.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 21.0°C July 16; minimum freezing point Mar. 5, 6.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.5	12.0	12.5	9.5	7.0	8.0	4.0	3.0	3.5	2.5	.5	1.5
2	16.0	13.0	14.5	10.5	9.0	10.0	3.5	2.5	3.0	2.5	.5	1.5
3	15.0	14.0	14.0	10.5	7.5	9.0	---	---	---	2.0	.5	1.0
4	15.5	13.0	14.0	8.0	6.0	7.0	---	---	---	1.0	.5	.5
5	15.0	13.0	14.0	8.0	5.5	7.0	---	---	---	1.0	.5	.5
6	15.0	12.5	13.5	7.0	5.5	6.0	---	---	---	1.0	.5	.5
7	13.0	11.0	12.0	7.5	6.5	7.0	---	---	---	.5	.5	.5
8	12.0	9.0	10.5	8.0	6.5	7.0	---	---	---	1.0	.5	.5
9	10.5	9.5	10.0	8.0	6.0	7.0	---	---	---	.5	.5	.5
10	10.0	8.5	9.0	9.5	8.0	9.0	---	---	---	1.0	.5	.5
11	9.5	8.0	8.5	9.0	8.0	8.0	---	---	---	.5	.5	.5
12	9.0	8.5	8.5	8.5	7.0	7.5	---	---	---	1.0	.5	.5
13	11.0	9.0	10.0	7.5	6.5	7.0	6.0	3.5	4.5	1.0	.5	.5
14	10.0	8.0	9.0	7.5	6.0	7.0	3.5	2.0	2.5	.5	.5	.5
15	9.0	7.0	8.5	6.0	4.5	5.5	2.5	.5	1.5	2.5	.5	1.5
16	10.5	7.0	9.0	6.0	4.0	5.0	3.0	1.0	2.0	3.0	.5	1.5
17	10.0	7.5	9.0	6.0	3.0	4.0	3.5	.5	1.5	2.0	.5	1.5
18	12.5	10.0	11.0	7.5	5.0	6.0	.5	.5	.5	3.0	2.0	2.5
19	12.0	9.5	11.0	7.5	5.0	6.5	.5	.5	.5	3.0	2.0	2.5
20	13.5	10.5	12.0	8.5	6.0	7.0	.5	.5	.5	2.5	.5	1.5
21	15.0	11.5	13.5	8.0	5.5	7.0	.5	.5	.5	1.0	.5	.5
22	15.0	12.0	13.5	8.0	6.5	7.5	.5	.5	.5	.5	.5	.5
23	13.5	11.5	13.0	9.5	7.5	8.0	4.0	1.0	2.5	1.0	.5	.5
24	13.0	10.0	11.5	10.0	8.5	9.0	4.0	3.5	4.0	1.0	.5	.5
25	10.0	8.0	9.0	10.0	10.0	10.0	5.0	4.0	4.0	1.0	.5	.5
26	8.0	6.5	7.5	12.0	10.0	11.0	4.5	3.0	4.0	.5	.5	.5
27	7.5	6.0	6.5	11.5	8.0	9.5	3.0	1.0	2.0	1.0	.5	.5
28	7.0	6.0	6.5	8.0	6.0	7.0	2.5	.5	1.5	1.0	.5	.5
29	8.0	7.0	7.5	6.5	4.5	5.5	3.5	2.0	2.5	1.0	.5	.5
30	9.5	7.5	8.0	4.5	3.0	3.5	3.5	2.0	2.5	1.0	.5	.5
31	9.0	5.5	7.5	---	---	---	3.0	1.0	1.5	1.0	.5	.5
MONTH	16.0	5.5	10.5	12.0	3.0	7.5				3.0	.5	1.0

01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.5	.5	.5	.5	.5	8.0	1.5	4.5	12.0	8.0	10.0
2	1.0	.5	.5	.5	.5	.5	4.0	2.5	3.0	13.0	8.5	10.5
3	1.0	.5	.5	.5	.5	.5	8.5	1.5	5.0	15.5	8.5	12.0
4	1.0	.5	.5	.5	.5	.5	5.5	3.5	4.0	14.5	9.0	12.0
5	1.0	.5	.5	.5	.0	.5	7.0	2.5	4.5	15.5	8.5	12.0
6	1.0	.5	.5	.5	.0	.5	9.5	2.5	6.0	15.5	9.5	13.0
7	1.0	.5	.5	.5	.5	.5	9.5	3.0	6.5	14.5	11.0	13.0
8	1.0	.5	.5	.5	.5	.5	7.0	5.0	5.5	14.5	9.5	12.0
9	.5	.5	.5	.5	.5	.5	6.0	5.0	5.5	12.5	8.0	10.0
10	1.0	.5	.5	1.0	.5	.5	8.5	4.5	6.5	14.0	6.5	10.0
11	1.0	.5	.5	2.0	.5	1.0	10.0	4.5	7.0	13.0	8.5	9.5
12	.5	.5	.5	2.0	.5	1.0	9.0	4.5	7.0	11.0	8.0	9.5
13	.5	.5	.5	.5	.5	.5	11.0	6.0	8.5	14.0	10.0	11.5
14	.5	.5	.5	.5	.5	.5	7.5	5.0	5.5	14.5	10.5	12.5
15	.5	.5	.5	.5	.5	.5	9.5	5.0	7.0	13.0	9.5	11.5
16	.5	.5	.5	1.0	.5	.5	6.0	3.0	4.5	16.0	7.5	11.5
17	.5	.5	.5	2.0	.5	1.0	9.0	1.5	5.5	16.5	9.5	13.0
18	.5	.5	.5	2.5	.5	1.0	8.5	3.5	6.0	15.0	10.0	11.5
19	.5	.5	.5	5.0	.5	2.0	11.5	3.5	8.0	15.0	10.0	12.5
20	.5	.5	.5	6.0	1.0	3.5	10.0	5.5	8.0	17.5	11.0	14.0
21	.5	.5	.5	2.5	1.0	1.5	13.0	6.0	9.5	16.0	11.0	12.5
22	.5	.5	.5	1.5	.5	.5	12.0	5.0	8.5	16.5	9.0	12.5
23	.5	.5	.5	5.0	.5	2.0	13.0	5.0	9.0	18.0	12.0	15.0
24	.5	.5	.5	4.5	.5	2.5	13.5	7.0	10.5	18.0	13.0	15.5
25	.5	.5	.5	2.5	1.0	1.5	12.0	8.5	9.5	19.0	13.0	16.0
26	.5	.5	.5	3.5	1.5	2.0	12.0	7.0	10.0	17.0	11.0	14.0
27	.5	.5	.5	5.0	1.0	3.0	11.0	7.5	8.5	17.0	10.0	13.5
28	.5	.5	.5	5.5	1.0	3.5	7.5	7.0	7.5	17.5	10.5	14.0
29	.5	.5	.5	3.5	2.0	2.5	7.5	6.5	7.0	18.5	11.5	15.0
30	---	---	---	3.0	2.0	2.5	12.0	7.0	9.0	15.0	12.0	13.0
31	---	---	---	3.0	2.0	2.5	---	---	---	15.5	11.5	13.5
MONTH	1.0	.5	.5	6.0	.0	1.5	13.5	1.5	7.0	19.0	6.5	12.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	12.5	15.5	19.5	13.5	16.0	---	---	---	16.5	12.0	14.5
2	16.0	13.5	15.0	16.5	13.0	14.0	---	---	---	16.5	12.0	15.0
3	14.5	12.5	13.5	16.0	12.0	14.0	---	---	---	19.0	14.0	16.0
4	17.5	12.0	14.5	20.5	13.0	16.5	---	---	---	18.0	13.0	15.5
5	18.0	11.0	14.5	18.0	14.5	16.0	---	---	---	16.0	14.0	15.0
6	18.0	12.0	15.0	20.0	13.5	16.5	---	---	---	18.5	12.5	15.5
7	15.0	12.5	13.5	18.0	12.5	15.5	---	---	---	17.5	13.5	15.5
8	14.0	10.0	12.5	17.0	13.5	15.5	---	---	---	17.0	12.5	14.5
9	10.0	8.5	9.5	17.5	13.0	15.5	---	---	---	16.0	11.5	14.0
10	12.5	8.0	10.5	19.0	14.0	16.5	---	---	---	16.5	13.0	14.5
11	12.5	8.5	10.5	18.5	14.0	16.5	---	---	---	17.0	11.0	14.0
12	17.0	9.0	13.5	19.5	14.0	16.5	18.5	15.0	16.5	16.5	13.0	14.5
13	18.0	11.0	14.5	19.5	13.0	16.5	19.0	14.0	16.5	15.5	13.0	14.0
14	19.5	12.0	16.0	20.0	14.0	17.0	16.0	14.0	14.5	15.5	14.0	14.5
15	19.5	14.0	17.0	18.0	14.5	16.5	18.5	13.5	15.5	14.5	12.0	13.5
16	19.0	14.0	16.0	21.0	15.0	17.5	16.0	13.0	14.5	12.5	9.5	11.5
17	18.5	12.0	15.5	20.5	15.5	18.0	18.0	11.5	14.5	12.5	12.0	12.5
18	16.5	12.0	14.5	18.5	12.0	15.5	16.0	13.5	14.5	14.5	12.0	13.0
19	18.0	12.0	15.0	17.5	11.5	14.5	16.0	13.0	14.0	15.5	10.0	12.5
20	15.0	11.5	13.0	17.5	12.0	15.5	14.5	12.5	13.5	14.5	11.5	13.5
21	17.0	11.0	13.5	18.5	12.0	15.5	15.0	12.0	13.5	18.5	14.0	15.5
22	18.0	12.0	15.0	18.0	13.5	16.0	15.5	13.0	14.0	19.0	15.0	17.0
23	19.0	12.5	16.0	18.5	13.5	16.0	18.0	13.0	15.0	18.5	14.5	16.5
24	20.0	14.0	17.0	19.5	13.5	16.5	17.5	13.5	15.5	16.0	12.0	13.5
25	18.0	12.0	15.5	19.5	14.5	17.0	18.0	14.0	16.0	13.0	11.5	12.0
26	18.0	11.0	15.0	18.5	15.0	16.5	19.0	13.5	16.0	15.5	11.5	13.0
27	18.5	11.0	15.0	18.0	15.0	16.5	19.5	14.5	17.0	14.5	10.0	12.0
28	17.0	14.0	15.0	16.5	13.5	15.0	18.0	14.5	16.5	14.0	9.0	11.5
29	14.5	13.0	13.5	18.5	13.0	15.5	18.0	15.0	16.0	14.5	10.5	12.0
30	18.5	14.0	15.5	18.5	15.0	16.5	19.0	15.0	16.5	16.0	12.5	13.5
31	---	---	---	---	---	---	17.0	13.0	15.0	---	---	---
MONTH	20.0	8.0	14.5	21.0	11.5	16.0				19.0	9.0	14.0

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'07", Orange County, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi (0.8 km) downstream from Basher Kill, 0.8 mi (1.3 km) southeast of Godeffroy, 1.7 mi (2.7 km) south of Cuddebackville, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--302 mi^2 (782 km^2).

PERIOD OF RECORD.--August to October 1903, August 1909 to April 1914 (gage heights and discharge measurements, also twice-daily figures of discharge for January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation), and July 1937 to current year. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.--WSP 821: Drainage area. WSP 1502: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft (140.104 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft or 0.299 m higher).

REMARKS.--Records good except those for winter periods, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 91.8 mi^2 (237.8 km^2) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft^3/s (935 m^3/s) Aug. 19, 1955, gage height, 12.49 ft (3.087 m), from rating curve extended above 11,000 ft^3/s (312 m^3/s) on basis of slope-area measurement of peak flow; practically no flow several times in July 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,340 ft^3/s (265 m^3/s) Mar. 21, gage height 9.37 ft (2.856 m); minimum discharge, 68 ft^3/s (1.93 m^3/s) Aug. 30, 31, Sept. 4, 5, 13, 23; minimum gage height, 2.77 ft (0.844 m) Aug. 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	563	292	603	319	130	120	1210	1050	187	342	85	93
2	1270	288	538	306	130	110	1160	885	177	227	95	96
3	851	980	476	290	120	110	953	772	184	213	114	94
4	971	811	441	241	120	100	1100	663	201	183	115	70
5	927	624	413	245	120	107	1140	578	175	159	103	76
6	2180	544	391	209	120	114	940	516	158	232	159	80
7	1320	500	386	207	118	123	831	472	181	197	121	76
8	1080	458	360	213	111	172	743	435	217	160	101	73
9	893	424	330	194	110	290	1380	398	204	150	98	73
10	819	435	316	182	109	240	2890	370	190	141	115	73
11	718	476	301	216	106	263	1940	357	174	131	115	73
12	638	458	292	322	107	220	1470	444	163	124	92	71
13	624	424	298	245	105	173	1240	433	153	109	90	72
14	550	418	308	265	104	183	1100	460	143	104	91	73
15	494	391	276	259	106	206	1280	402	136	99	91	75
16	458	370	264	239	111	199	1190	352	135	99	92	73
17	424	355	303	228	110	197	990	321	131	103	85	79
18	396	340	249	225	110	679	780	317	124	102	82	104
19	386	325	226	222	110	725	688	365	122	116	81	89
20	365	311	226	200	116	582	606	337	123	115	83	77
21	345	297	233	180	120	2170	536	326	125	112	82	74
22	325	288	264	170	127	5350	492	319	118	139	81	73
23	316	283	264	160	129	3040	455	291	113	147	80	70
24	325	274	294	150	137	2410	424	266	110	113	76	73
25	320	288	530	160	141	2040	401	246	107	96	75	75
26	297	659	585	163	139	1620	383	224	126	90	74	82
27	279	1680	462	166	126	1330	376	204	131	87	75	80
28	288	980	409	163	124	1200	728	194	120	85	74	78
29	320	803	382	147	120	1400	1810	183	105	86	73	74
30	292	681	362	140	---	1530	1300	175	592	91	71	71
31	270	---	344	140	---	1320	---	174	---	87	70	---
TOTAL	19304	15457	11126	6566	3436	28323	30536	12529	4925	4239	2839	2340
MEAN	623	515	359	212	118	914	1018	404	164	137	91.6	78.0
MAX	2180	1680	603	322	141	5350	2890	1050	592	342	159	104
MIN	270	274	226	140	104	100	376	174	105	85	70	70

CAL YR 1979 TOTAL 191302 MEAN 524 MAX 3100 MIN 88
WTR YR 1980 TOTAL 141620 MEAN 387 MAX 5350 MIN 70

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Sussex County, Hydrologic Unit 02040104, on right bank 0.4 mi (0.6 km) upstream from toll bridge on U.S. Route 206 at Montague, 0.8 mi (1.3 km) downstream from Sawkill Creek, and at mile 246.3 (396.3 km).

DRAINAGE AREA.--3,480 mi² (9,013 km²).

PERIOD OF RECORD.--March 1936 to September 1939 (gage heights only, published as "at Milford, PA"). October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft (112.755 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft (21.3 m) lower.

REMARKS.--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--41 years, 5,931 ft³/s (168.0 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft³/s (7,080 m³/s) Aug. 19, 1955 (gage height, 35.15 ft or 10.714 m), from rating curve extended above 90,000 ft³/s (2,550 m³/s) on basis of flood-routing study; minimum, 382 ft³/s (10.8 m³/s) Aug. 24, 1954, gage height, 3.83 ft (1.167 m); minimum daily, 412 ft³/s (11.7 m³/s) Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 10, 1903, reached a stage of 35.5 ft (10.82 m) from floodmark, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 69,800 ft³/s (1,980 m³/s) Mar. 22, gage height, 18.48 ft (5.633 m); minimum, 1,030 ft³/s (29.2 m³/s) Sept. 25, gage height, 4.48 ft (1.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2770	2820	8740	4370	1550	2400	17400	14800	1740	3800	1800	1990
2	7890	2700	7320	3330	2300	1650	16700	12700	1730	3010	2060	1800
3	7770	6090	6930	4070	1500	1600	15200	11000	2230	2610	2150	1860
4	8140	12500	7230	3640	1750	2300	14600	8840	2210	2280	2460	1720
5	8060	9150	6810	3400	2000	1900	16100	7840	1740	1660	2930	1900
6	12500	7470	6370	2200	1850	1800	13900	8620	1870	1750	2980	1740
7	12500	6400	5420	2100	1900	1700	12000	7140	2080	2010	2640	1980
8	9590	5650	4700	3100	1750	1800	10400	6230	2210	2620	2560	1720
9	8600	5060	3760	3000	1950	3100	11100	5370	1850	2360	2480	1650
10	7990	4280	3680	3000	1700	4000	23200	4690	2260	2250	1640	1680
11	7750	4220	4320	2900	1600	3700	23200	3920	2530	2310	1640	1640
12	6890	4160	4240	3100	1750	2900	17600	4340	2260	2090	1870	1760
13	6360	4060	4170	3020	1750	2500	14800	4970	1890	1990	1860	1930
14	5210	3810	4300	3010	1600	3000	14100	4360	1680	1620	1780	1820
15	4540	3380	4190	3100	1650	1850	17500	4310	1710	2180	1990	1720
16	5190	3160	3260	3000	1950	1600	18400	3650	1660	2190	1990	1940
17	5060	3210	3110	2700	1700	1850	15500	3090	2030	2340	1790	1900
18	4850	2960	3800	3300	1700	4900	13500	2700	1980	2100	1490	2150
19	4370	2770	4100	2990	1600	13200	11200	2770	1880	1860	1700	2120
20	3840	2730	3400	2190	1800	10100	9460	3090	1920	1540	1370	2120
21	2740	2870	3400	1890	2000	12600	8840	2890	1820	1560	1490	1790
22	2640	2730	3600	2270	1650	58400	8490	2750	2030	2580	1550	1730
23	3740	2410	2780	2670	2100	30500	7290	2570	1810	2170	1660	2040
24	4150	2490	2700	2550	1750	20000	6780	2320	1910	2230	1660	1720
25	4830	2410	3590	2500	1350	18100	6240	1990	1830	2070	1650	1720
26	5170	4580	7510	2400	1450	16500	5400	1800	1920	2040	1890	1840
27	3560	27000	7090	2000	1450	13300	4120	1620	1840	1790	1990	1770
28	2610	20300	5970	2000	1900	12100	5890	1700	1840	1600	1980	1690
29	2730	13500	5210	1950	1700	13000	14400	1410	1910	1570	2000	1610
30	3130	10600	4090	1600	---	17700	17300	1480	2930	1490	1960	1950
31	2970	---	3940	1850	---	17800	---	1660	---	1950	2020	---
TOTAL	178140	185470	149730	85200	50700	297850	390610	146620	59300	65620	61030	55000
MEAN	5746	6182	4830	2748	1748	9608	13020	4730	1977	2117	1969	1833
MAX	12500	27000	8740	4370	2300	58400	23200	14800	2930	3800	2980	2150
MIN	2610	2410	2700	1600	1350	1600	4120	1410	1660	1490	1370	1610

CAL YR 1979 TOTAL 2469080 MEAN 6765 MAX 57200 MIN 1500
WTR YR 1980 TOTAL 1725270 MEAN 4714 MAX 58400 MIN 1350

(NOTE: WATER-QUALITY DATA FOR THIS STATION ARE NOT PUBLISHED IN THIS REPORT: THEY ARE PUBLISHED IN THE SERIES "WATER RESOURCES DATA FOR NEW JERSEY.")

RESERVOIRS IN DELAWARE RIVER BASIN

01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, Hydrologic Unit 02040102, near release chamber at Downsville Dam on East Branch Delaware River, and 1.6 mi (2.6 km) east of Downsville, N.Y. DRAINAGE AREA, 371 mi^2 (961 km^2). PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 15, 1954. Usable capacity 140,190 mil gal (530.6 hm^3) between minimum operating level, elevation, 1,152.0 ft (351.13 m) and crest of spillway, elevation, 1,280.0 ft (390.14 m). Capacity: at crest of spillway 149,700 mil gal (566.6 hm^3); at minimum operating level, 9,609 mil gal (36.37 hm^3); at sill of diversion tunnel, elevation, 1,143.0 ft (348.39 m), 6,098 mil gal (23.08 hm^3); in dead storage below release outlet, elevation, 1,126.50 ft (343.357 m), 1,898 mil gal (7.184 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see elsewhere in this section), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 154,027 mil gal (583.0 hm^3) Apr. 5, 1960, elevation, 1,282.27 ft (390.836 m); minimum observed (after first filling), 9,575 mil gal (36.24 hm^3) Dec. 26, 1964, elevation, 1,151.92 ft (351.105 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 151,374 mil gal (573.0 hm^3) Apr. 13, elevation, 1,280.85 ft (390.403 m); minimum, 96,318 mil gal (364.6 hm^3) Sept. 30, elevation, 1,247.35 ft (380.192 m).

01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, Hydrologic Unit 02040101, in emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi (2.9 km) southeast of Stilesville, N.Y. DRAINAGE AREA, 454 mi^2 (1,176 km^2). PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WRD NY 1972: 1966. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 30, 1963. Usable capacity 95,706 mil gal (362.2 hm^3) between minimum operating level, elevation, 1,040.0 ft (316.99 m) and crest of spillway, elevation, 1,150.0 ft (350.52 m). Capacity, at crest of spillway, 98,618 mil gal (373.3 hm^3); at minimum operating level, 2,912 mil gal (11.02 hm^3); at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft (315.47 m), 1,892 mil gal (7.161 hm^3); in dead storage below release outlet elevation, 1,020.5 ft (311.05 m), 328 mil gal (1.241 hm^3). Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see elsewhere in this section); is released in Delaware River for downstream low flow augmentation, as directed by the Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to January 29, 1964. Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 108,116 mil gal (409.2 hm^3) Mar. 15, 1977, elevation, 1,155.85 ft (352.303 m); minimum observed (after first filling), 11,901 mil gal (45.05 hm^3) Nov. 7, 1968, elevation, 1,066.24 ft (324.990 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 102,368 mil gal (387.5 hm^3) Apr. 1, elevation, 1,152.33 ft (351.230 m); minimum, 41,356 mil gal (156.5 hm^3) Sept. 30, elevation, 1,105.21 ft (336.868 m).

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'25", long 74°47'00", Sullivan County, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi (2.9 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 118 mi^2 (306 km^2) excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft (308 m).

Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft^3 (40.7 hm^3) between elevations 1,010.0 ft (307.85 m), minimum operating pool, and 1,071.2 ft (326.50 m), top of flashboards. Capacity below elevation 1,010.0 ft (307.85 m), minimum operating pool, about 212.7 mil ft^3 (6.02 hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft (307.85 m). Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft^3 (41.4 hm^3) Mar. 14, 1977, elevation, 1,071.8 ft (326.68 m); minimum (after first filling), 141.4 mil ft^3 (4.00 hm^3) Dec. 2, 1938, elevation, 987.5 ft (300.99 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,387 mil ft^3 (39.3 hm^3) Oct. 10, elevation, 1,070.0 ft (326.14 m); minimum, 1,014 mil ft^3 (28.7 hm^3) Sept. 30, elevation, 1,060.1 ft (323.12 m).

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) southeast of village of Black Lake, N.Y. DRAINAGE AREA, 23.2 mi^2 (60.1 km^2). PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959 (M). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,165.0 ft (355.09 m).

Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity 1,098.2 mil ft^3 (31.1 hm^3) between elevations 1,165.0 ft (355.09 m), minimum operating pool, and 1,220.0 ft (371.86 m), top of permanent flashboards. Capacity below elevation 1,165.0 ft (355.09 m), minimum operating pool, about 26.8 mil ft^3 (0.759 hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft (355.09 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft^3 (33.2 hm^3) July 20, 1945, elevation, 1,222.0 ft (372.47 m); minimum observed (after first filling), -26.8 mil ft^3 (0.759 hm^3) Nov. 15, 1928, elevation, 1,144.5 ft (348.84 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 753 mil ft^3 (21.3 hm^3) June 9, elevation, 1,209.0 ft (368.50 m); minimum observed, 49.2 mil ft^3 (1.39 hm^3) Aug. 29, elevation, 1,173.1 ft (357.56 m).

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 6.46 mi^2 (16.7 km^2), excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WDR NY-75-1: 1974(m). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,043.3 ft (318.00 m).

Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft^3 (3.85 hm^3) between elevations 1,043.3 ft (318.00 m), minimum operating pool, and 1,072.0 ft (326.75 m), top of permanent flashboards. Capacity below elevation 1,043.3 ft (318.00 m), minimum operating pool, about 6.54 mil ft^3 (0.185 hm^3). Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft (318.00 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft^3 (4.12 hm^3) July 30, 31, 1945, elevation, 1,073.1 ft (327.08 m); minimum observed (after first filling), about 6.54 mil ft^3 (0.185 hm^3) Mar. 16, 1963, elevation, 1,038.0 ft (316.38 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 131.1 mil ft^3 (3.71 hm^3) Oct. 15, elevation, 1,071.4 ft (326.56 m); minimum observed, 54.0 mil ft^3 (1.53 hm^3) Sept. 26, elevation, 1,060.0 ft (323.09 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01435900 NEVERSINK RESERVOIR.--Lat 41°49'40", long 74°38'21", Sullivan County, Hydrologic Unit 02040104, at a gatehouse at Neversink Dam on Neversink River, and 2 mi (3 km) southwest of Neversink, N.Y. DRAINAGE AREA, 91.8 mi^2 (238 km^2). PERIOD OF RECORD, June 1953 to current year. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began June 2, 1953. Usable capacity 34,941 mil gal (132.25 hm^3) between minimum operating level, elevation, 1,319.0 ft (402.03 m) and crest of spillway, elevation, 1,440.0 ft (438.91 m). Capacity at crest of spillway 37,146 mil gal (140.6 hm^3); at minimum operating level, 2,205 mil gal (8.35 hm^3); dead storage below diversion sill and outlet sill, elevation 1,314.0 ft (400.51 m), 1,680 mil gal (6.36 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see elsewhere in this section); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 37,978 mil gal (143.7 hm^3) Apr. 25, 1961, elevation, 1,441.67 ft (439.421 m); minimum observed (after first filling), 1,985 mil gal (7.513 hm^3) Nov. 25, 1964, elevation, 1,316.98 ft (401.415 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 37,295 mil gal (141.2 hm^3) Apr. 16, elevation, 1,440.30 ft (439.003 m); minimum observed, 15,411 mil gal (58.3 hm^3) Sept. 30, elevation, 1,384.78 ft (422.081 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	01416900 Pepacton Reservoir **			01424997 Cannonsville Reservoir **			01433000 Swinging Bridge Reservoir *		
Sept. 30	1,255.70	108,714		1,128.62	68,498		1,065.0	1,191	
Oct. 31	1,257.40	111,351	+ 132	1,136.00	78,260	+ 487	1,066.3	1,241	+ 18.5
Nov. 30	1,264.40	122,584	+ 579	1,151.04	100,291	+1,140	1,068.7	1,335	+ 36.3
Dec. 31	1,262.10	118,827	- 188	1,149.61	98,025	- 113	1,066.0	1,229	- 39.5
CAL YR 1979	-	-	+ 98.0	-	-	+ 201	-	-	- 3.6
Jan. 31	1,263.58	121,237	+ 120	1,145.03	91,058	- 348	1,064.6	1,176	- 19.8
Feb. 28	1,261.30	117,536	- 197	1,132.84	74,018	- 909	1,065.3	1,203	+ 10.5
Mar. 31	1,275.08	140,882	+1,170	1,152.33	102,368	+1,420	1,066.9	1,264	+ 22.9
Apr. 30	1,280.49	150,706	+ 507	1,151.57	101,145	- 63.1	1,067.6	1,291	+ 10.6
May 31	1,277.24	144,758	- 297	1,146.90	93,902	- 362	1,066.1	1,233	- 21.7
June 30	1,271.63	134,819	- 513	1,136.42	78,841	- 777	1,065.1	1,195	- 14.7
July 31	1,265.40	124,237	- 528	1,129.09	69,096	- 486	1,063.0	1,117	- 29.1
Aug. 31	1,257.57	111,616	- 630	1,117.31	54,645	- 721	1,067.1	1,272	+ 57.8
Sept. 30	1,246.95	95,746	- 819	1,104.32	40,461	- 732	1,060.1	1,014	- 99.5
WTR YR 1980	-	-	- 54.8	-	-	- 119	-	-	- 5.6

Date	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01433100 Toronto Reservoir *			01433200 Cliff Lake *			01435900 Neversink Reservoir **		
Sept. 30	1,178.7	115		1,065.0	83.7		1,408.12	23,306	
Oct. 31	1,179.2	122	+ 2.6	1,070.4	123	+ 14.6	1,415.59	26,228	+146
Nov. 30	1,184.4	202	+ 30.8	1,069.7	118	- 1.9	1,422.36	29,039	+145
Dec. 31	1,186.2	231	+ 11.1	1,065.8	110	- 2.9	1,420.15	28,105	- 46.6
CAL YR 1979	-	-	+ 1.7	-	-	+ 0.3	-	-	+ 43.2
Jan. 31	1,181.1	150	- 30.6	1,064.6	81.9	- 10.6	1,414.00	25,590	-126
Feb. 28	1,188.9	278	+ 51.4	1,065.2	85.0	+ 1.2	1,407.65	23,128	-131
Mar. 31	1,198.0	468	+ 70.8	1,067.6	102	+ 6.2	1,432.94	33,755	+530
Apr. 30	1,206.2	676	+ 80.4	1,067.4	100	- 0.6	1,437.23	35,791	+105
May 31	1,208.7	945	+100	1,066.1	91.0	- 3.4	1,434.02	34,261	- 76.4
June 30	1,202.5	579	-141	1,067.4	100	+ 3.5	1,426.26	30,726	-182
July 31	1,192.0	337	- 90.5	1,066.0	90.3	- 3.6	1,414.43	25,762	-248
Aug. 31	1,173.1	49	-108	1,067.2	98.6	+ 3.1	1,397.27	19,397	-318
Sept. 30	1,173.2	50	+ 0.4	1,060.1	54.0	- 17.2	1,384.38	15,292	-212
WTR YR 1980	-	-	- 2.0	-	-	- 0.9	-	-	- 33.9

* Elevation at 2400 hours.
** Elevation at 0900 hours on first day of following month.

DIVERSIONS FROM DELAWARE RIVER BASIN

01415200 Diversion from Pepacton Reservoir (see preceding pages) on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 6, 1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WRD NY 1972: 1970.

014239000 Diversion from Cannonsville Reservoir (see preceding pages) on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 29, 1964. Records furnished by Bureau of Water Resources Development, City of New York.

01435800 Diversion from Neversink Reservoir (see preceding pages) on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Month	01415200 Pepacton Reservoir	01423900 Cannonsville Reservoir	01435800 Neversink Reservoir
October.......	703	377	232
November......	697	183	220
December......	699	347	214
CAL YR 1979	650	201	262
January.......	140	596	207
February......	269	580	147
March.........	621	295	73.0
April.........	339	0	436
May...........	690	40.3	207
June..........	697	293	230
July..........	697	128	272
August........	697	0.45	307
September.....	699	93.4	185
WTR YR 1980	580	244	228

04250750 SANDY CREEK NEAR ADAMS, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°48'48", long 76°04'30", Jefferson County, Hydrologic Unit 04140102, on left bank 250 ft (76 m) upstream from highway bridge on Liberty Street, 0.2 mi (0.3 km) downstream from tributary, 2.5 mi (4.0 km) downstream from Adams, and 10.0 mi (16.1 km) upstream from mouth. Water-quality sampling site at discharge station; except for specific conductance and water temperatures which are measured about 2 mi (3.2 km) downstream, in the village of Belleville.

DRAINAGE AREA.--128 mi² (332 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 523.71 ft (159.627 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Moderate diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--23 years, 269 ft³/s (7.618 m³/s), 28.54 in/yr (725 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s (334 m³/s) Apr. 4, 1963, gage height, 11.01 ft (3.356 m), from rating curve extended above 5,500 ft³/s (156 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s (0.042 m³/s) Sept. 17, 18, 1963, Aug. 19, 1964; minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 7, 11, 1960, Sept. 17, 1963, Aug. 16, Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)
Nov. 26	2200	*7,180	203	*9.83	2.996	Mar. 21	2330	5,640	160	9.02	2.749
Mar. 18	0130	3,110	88	6.39	1.948						

Minimum discharge, 7.9 ft³/s (0.224 m³/s) Aug. 30, 31, gage height, 1.00 ft (0.305 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	281	537	200	84	52	687	379	39	29	67	14
2	41	333	518	170	80	52	623	294	47	27	53	19
3	39	337	459	132	76	52	518	363	86	27	53	52
4	37	267	439	111	74	52	681	267	174	24	74	39
5	44	229	414	100	72	60	900	219	95	20	51	28
6	494	201	633	98	70	80	760	197	64	18	46	20
7	321	204	863	100	68	100	562	191	70	16	44	17
8	278	239	869	100	66	100	552	167	90	21	37	15
9	300	210	607	100	64	100	1210	151	142	66	33	13
10	295	379	518	110	62	130	1390	142	101	41	28	15
11	349	315	557	311	60	266	737	128	77	28	24	17
12	447	246	1260	743	58	445	649	119	63	20	30	15
13	844	217	856	374	58	389	1070	112	50	16	69	13
14	898	315	504	355	56	342	612	123	42	14	59	124
15	473	281	408	346	54	337	698	113	39	12	82	169
16	415	270	337	298	52	282	607	99	48	12	53	85
17	303	236	270	259	50	351	468	87	46	19	37	57
18	309	256	235	408	49	1630	424	98	37	15	28	80
19	256	217	199	328	48	838	355	238	34	12	23	63
20	312	195	180	235	48	946	307	177	117	11	22	46
21	330	175	170	160	50	3090	278	120	207	346	19	47
22	253	243	190	145	54	3160	224	95	117	942	17	48
23	210	337	251	134	58	1220	206	82	71	602	15	60
24	321	292	547	89	66	784	188	71	52	278	13	55
25	296	356	1170	116	60	959	188	63	41	129	12	41
26	233	2400	1010	140	56	726	219	55	34	75	11	93
27	195	2350	592	142	54	671	186	49	30	60	11	213
28	181	1050	394	111	54	737	199	45	28	56	10	109
29	1240	726	310	110	52	939	820	42	26	126	9.3	74
30	537	509	270	100	---	1140	571	39	28	213	9.3	56
31	340	---	230	90	---	913	---	38	---	104	9.3	---
TOTAL	10634	13666	15797	6215	1753	20943	16889	4363	2095	3379	1048.9	1697
MEAN	343	456	510	200	60.4	676	563	141	69.8	109	33.8	56.6
MAX	1240	2400	1260	743	84	3160	1390	379	207	942	82	213
MIN	37	175	170	89	48	52	186	38	26	11	9.3	13
CFSM	2.68	3.56	3.98	1.56	.47	5.28	4.40	1.10	.55	.85	.26	.44
IN.	3.09	3.97	4.59	1.81	.51	6.09	4.91	1.27	.61	.98	.30	.49

CAL YR 1979 TOTAL 121325.2 MEAN 332 MAX 4370 MIN 5.2 CFSM 2.59 IN 35.26
WTR YR 1980 TOTAL 98479.9 MEAN 269 MAX 3160 MIN 9.3 CFSM 2.10 IN 28.62

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1978 to current year.
CHEMICAL DATA: 1965, 1978 (c); 1979-80 (d).
MINOR ELEMENTS DATA: 1978-79 (b), 1980 (c).
ORGANIC DATA: OC--1978 (c), 1979-80 (d).
NUTRIENT DATA: 1978 (c), 1979-80 (d).
BIOLOGICAL DATA:
Bacteria--1978 (c), 1979-80 (d).
Phytoplankton--1978-80 (c).
Periphyton--1978-80 (b).
SEDIMENT DATA: 1978 (c), 1979-80 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Once-daily January 1978 to September 1980 (discontinued). Recorder July to September 1980.
WATER TEMPERATURES: Once-daily January 1978 to September 1980 (dicontinued). Recorder July to September 1980.

INSTRUMENTATION.--Specific conductance and water temperature digital recorder installed July 29, 1980 at gaging station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Once-daily maximum, 540 micromhos Aug. 6 and 13, 1978; once-daily minimum, 115 micromhos Mar. 24, 1979.
WATER TEMPERATURES: Once-daily maximum, 33.0°C July 24, 1979; once-daily minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Once-daily maximum, 440 micromhos June 20; once-daily minimum, 142 micromhos Mar. 22. Recorder maximum observed, 356 micromhos Aug. 31; recorder minimum observed 200 micromhos Sept. 27, 1980.
WATER TEMPERATURES: Maximum daily, 30.5°C July 18; minimum daily, freezing point on many days during winter period. Recorder maximum observed, 25.5°C Aug. 7, 8.

REVISIONS.--Once-daily specific conductance values for dates listed below have been judged not representive of the stream and have been deleted from the records.

1978 Water Year	1979 Water Year
Aug. 4, 6, 13, 14	Nov. 7, 8, 16
Sept. 19	Dec. 3, 26, 27, 30, 31
	Jan. 1, 6, 7, 13, 23, 27
	Feb. 18
	June 9, 10
	July 24
	Aug. 18, 29

The maximum daily specific conductance for 1978 water year has been revised to 540 micromhos Aug. 6, 13, and for the 1979 water year to 440 micromhos July 16, superseding those previously published.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 10...	1300	285	270	7.7	5.0	2.0	13.0	102	1700	550	110
NOV 13...	1400	216	280	8.0	5.0	1.0	12.8	100	1000	630	140
DEC 10...	1430	480	310	7.4	.0	1.0	14.0	97	250	90	150
JAN 21...	1300	144	310	7.7	1.5	.25	13.8	102	K33	65	160
FEB 19...	1330	50	340	7.7	2.0	.20	13.6	99	610	660	170
MAR 18...	1030	1420	125	7.2	2.0	.95	13.3	97	1800	6200	45
APR 23...	1000	211	283	7.8	7.0	.30	11.8	97	490	93	140
MAY 20...	1230	174	242	8.1	15.5	.02	11.6	120	1200	K53	130
JUN 18...	1430	35	376	8.3	19.0	.25	9.8	110	580	K60	140
JUL 21...	1300	583	171	7.0	22.0	5.0	7.3	86	>6000	K5000	75
AUG 19...	1700	20	291	8.4	22.0	.50	10.4	124	4000	80	150

K Results based on colony count outside the acceptable range (non-ideal colony)

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 10...	22	38	2.9	3.3	1.4	85	11	5.2	.1	4.9	137
NOV 13...	24	52	3.4	4.1	1.3	120	16	5.8	.1	3.7	172
DEC 10...	23	56	3.3	3.6	1.2	130	16	5.9	.1	4.5	183
JAN 21...	31	58	4.0	5.0	1.0	130	15	7.0	.1	4.6	172
FEB 19...	22	62	4.2	5.4	1.2	150	19	9.1	.1	4.1	200
MAR 18...	7	16	1.3	3.0	2.4	38	7.1	5.5	.1	1.6	80
APR 23...	18	50	3.1	3.7	1.2	120	9.7	6.4	.1	1.9	163
MAY 20...	26	43	4.6	5.6	1.0	100	12	5.0	.1	2.7	140
JUN 18...	18	49	3.9	6.0	1.6	120	17	9.1	.2	1.7	179
JUL 21...	13	26	2.5	3.2	2.1	62	22	3.8	.1	3.9	117
AUG 19...	21	53	4.5	7.0	1.6	130	16	10	.2	1.6	187

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROJEN, DISSOLVED (MG/L AS N)
OCT 10...	119	.23	.23	.00	.01	.21	.18	.21	.19	.44	.42
NOV 13...	161	.47	.58	.00	.02	.39	.38	.39	.40	.86	.98
DEC 10...	175	1.1	1.4	.00	.10	.20	.51	.20	.61	1.3	2.0
JAN 21...	177	.77	.77	.00	.00	.96	.40	.96	.40	1.7	1.2
FEB 19...	201	.63	1.4	.01	.04	.35	.31	.36	.35	.99	1.8
MAR 18...	64	.55	.95	.42	.55	.98	.75	1.4	1.3	2.0	2.3
APR 23...	152	.80	.80	.01	.01	.34	.34	.35	.35	1.2	1.2
MAY 20...	136	.32	.38	.15	.15	.38	.13	.53	.28	.85	.66
JUN 18...	162	.56	.34	.09	.08	.23	.20	.32	.28	.88	.62
JUL 21...	104	.77	.73	.08	.02	1.3	.52	1.4	.54	2.2	1.3
AUG 19...	173	.23	.25	.06	.02	.17	.13	.23	.15	.46	.40

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT 10...	.020	.020	1	1	0	0	0	2	20	10	0
NOV 13...	.040	.050	--	--	--	--	--	--	--	--	--
DEC 10...	.010	.010	--	--	--	--	--	--	--	--	--
JAN 21...	.010	.000	0	0	100	20	1	5	20	10	1
FEB 19...	.710	.820	--	--	--	--	--	--	--	--	--
MAR 18...	.250	.150	--	--	--	--	--	--	--	--	--
APR 23...	.020	.010	0	0	<50	20	2	0	10	<10	0
MAY 20...	.040	.020	--	--	--	--	--	--	--	--	--
JUN 18...	.140	.130	1	1	<50	20	0	3	20	10	0
JUL 21...	.250	.020	--	--	--	--	--	--	--	--	--
AUG 19...	.130	.130	--	--	--	--	--	--	--	--	--

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 10...	0	4	3	230	60	1	2	10	7	.2	.1
NOV 13...	--	--	--	--	--	--	--	--	--	--	--
DEC 10...	--	--	--	--	--	--	--	--	--	--	--
JAN 21...	1	2	3	140	20	4	4	10	7	<.1	<.1
FEB 19...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--	--	--	--
APR 23...	0	5	3	120	10	10	3	10	8	.1	.1
MAY 20...	--	--	--	--	--	--	--	--	--	--	--
JUN 18...	0	3	3	120	20	5	5	10	9	<.1	<.1
JUL 21...	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	--	--	--

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT 10...	0	0	0	0	0	0	10	20	--	--	.4
NOV 13...	--	--	--	--	0	--	--	--	4.2	--	--
DEC 10...	--	--	--	--	--	--	--	--	2.4	--	--
JAN 21...	1	1	0	0	0	0	70	250	--	--	.3
FEB 19...	--	--	--	--	1	--	--	--	2.2	--	--
MAR 18...	--	--	--	--	--	--	--	--	6.7	--	--
APR 23...	3	5	0	0	0	0	260	150	--	--	.3
MAY 20...	--	--	--	--	0	--	--	--	1.8	--	--
JUN 18...	1	0	0	0	0	0	20	9	--	4.7	.7
JUL 21...	--	--	--	--	0	--	--	--	8.9	--	--
AUG 19...	--	--	--	--	0	--	--	--	2.3	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 10...	1300	285	3	2.3
NOV 13...	1400	216	2	1.2
DEC 10...	1430	480	6	7.8
JAN 21...	1300	144	3	1.2
FEB 19...	1330	50	3	.40
MAR 18...	1030	1420	136	521
APR 23...	1000	211	4	2.3
MAY 20...	1230	174	3	1.4
JUN 18...	1430	35	2	.19
JUL 21...	1300	583	128	201
AUG 19...	1700	20	3	.16

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
May 20 to June 3	14	2.44	1.02	3.35	.640	Polyethylene strip
June 3 to June 18	15	3.47	1.58	3.49	.640	Polyethylene strip
June 18 to July 29	41	4.80	3.70	8.09	3.71	Polyethylene strip
July 29 to Aug. 19	21	28.0	25.5	15.2	3.50	Polyethylene strip

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	NOV 13,79	MAR 18,80	MAY 20,80	JUN 18,80	JUL 21,80	AUG 19,80
TIME	1400	1030	1230	1430	1300	1700
TOTAL CELLS/ML	190	2200	1000	3300	17000	2300
DIVERSITY: DIVISION	0.4	0.2	1.2	0.6	1.1	1.4
.CLASS	0.4	0.2	1.2	0.6	1.1	1.4
..ORDER	1.0	0.3	1.5	0.8	1.4	2.0
...FAMILY	2.3	2.1	2.4	1.5	2.4	2.7
....GENUS	2.6	2.3	2.4	1.5	2.6	2.9

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...COELASTRACEAE												
....COELASTRUM	--	-	--	-	--	-	240	7	400	2	260	11
...HYDRODICTYACEAE												
....PEDIASTRUM	--	-	--	-	--	-	--	-	1200	7	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	170	5	950	6	100	5
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	150	1	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	150	1	51	2
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	--	-	2500#	75	8800#	53	720#	32
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	76	3	13	1	67	2	100	1	64	3
..ZYGNEMATALES												
...DESMIDIACEAE												
....COSMARIUM	--	-	--	-	--	-	--	-	*	0	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	29#	15	38	2	--	-	--	-	100	1	130	6
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	29#	15	38	2	--	-	--	-	200	1	--	-
....COCCONEIS	--	-	190	8	--	-	--	-	--	-	13	1
...CYMBELLACEAE												
....CYMBELLA	29#	15	--	-	100	10	100	3	200	1	--	-
...DIATOMACEAE												
....DIATOMA	--	-	--	-	26	2	--	-	--	-	--	-
...FRAGILARIACEAE												
....FRAGILARIA	--	-	610#	27	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	76	3	13	1	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	14	8	--	-	39	4	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	57#	31	760#	34	130	13	50	2	200	1	130	6
....PINNULARIA	14	8	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	--	-	460#	20	120	11	67	2	700	4	13	1
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	13	1	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....AGMENELLUM	--	-	--	-	--	-	--	-	1200	7	100	5
....ANACYSTIS	--	-	--	-	90	9	120	4	950	6	210	9
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	--	-	490#	47	--	-	--	-	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	--	-	--	-	1200	7	490#	21
....SPIRULINA	14	8	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	--	-	17	1	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	17	1	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	290	260	---	350	370	205	270	340	270	290	320
2	340	270	265	310	350	380	195	280	370	350	250	320
3	360	270	270	335	330	370	215	340	245	250	240	330
4	310	280	270	370	360	---	165	280	245	360	235	290
5	360	290	280	370	360	340	180	290	260	310	235	220
6	220	310	250	390	360	350	200	290	260	---	320	240
7	260	310	230	380	370	320	205	300	290	260	305	250
8	245	270	240	380	370	310	---	290	290	350	245	340
9	280	250	285	360	360	320	150	290	225	290	225	350
10	230	245	310	350	360	300	---	260	230	---	275	300
11	270	---	300	350	350	300	---	270	280	270	300	300
12	220	280	195	250	360	270	195	290	250	---	225	340
13	175	280	245	250	350	300	195	310	280	330	240	350
14	185	250	290	255	350	310	215	270	270	380	235	280
15	235	260	305	250	350	---	215	280	310	280	245	240
16	220	280	315	270	350	320	215	290	270	330	220	270
17	250	290	310	270	350	310	240	290	260	300	300	270
18	245	260	330	230	---	310	235	280	270	250	---	260
19	260	270	350	255	---	175	360	230	260	280	285	230
20	270	290	340	275	350	190	280	250	440	370	290	---
21	270	290	330	310	340	146	280	280	215	185	350	240
22	270	270	330	330	330	142	280	280	220	170	240	270
23	280	280	315	320	320	200	280	320	220	185	250	275
24	250	250	230	360	310	195	280	300	245	230	250	285
25	290	245	225	320	320	180	290	320	270	270	310	305
26	280	230	225	330	340	205	270	320	250	275	290	320
27	290	195	---	320	340	220	280	340	320	240	250	270
28	290	250	290	320	350	205	260	370	320	250	280	280
29	160	280	290	330	360	180	380	360	340	300	240	310
30	245	280	290	330	---	170	240	360	300	245	360	280
31	290	---	340	330	---	170	---	370	---	245	300	---
MEAN	264	269	284	317	348	261	241	299	278	279	269	287

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	272	249	260	333	313	321
2				---	---	---	277	240	266	328	302	314
3				---	---	---	283	253	271	318	265	283
4				---	---	---	269	219	239	288	278	283
5				---	---	---	268	228	244	312	289	299
6				---	---	---	277	250	268	316	302	310
7				---	---	---	275	231	256	324	302	312
8				---	---	---	277	253	266	312	297	304
9				---	---	---	285	258	274	329	307	316
10				---	---	---	293	253	276	327	309	316
11				---	---	---	293	257	279	311	295	305
12				---	---	---	303	283	293	314	297	306
13				---	---	---	287	234	255	309	300	306
14				---	---	---	259	230	243	322	203	280
15				---	---	---	261	227	242	230	201	215
16				---	---	---	263	227	239	256	230	245
17				---	---	---	264	254	258	278	256	262
18				---	---	---	282	265	273	275	240	253
19				---	---	---	299	285	291	264	239	245
20				---	---	---	310	287	297	271	247	258
21				---	---	---	311	291	299	282	252	269
22				---	---	---	301	291	295	280	251	268
23				---	---	---	326	302	311	275	247	259
24				---	---	---	332	305	315	279	251	259
25				---	---	---	311	299	306	286	271	277
26				---	---	---	337	312	323	292	222	276
27				---	---	---	345	320	330	230	200	213
28				---	---	---	340	320	330	264	230	248
29				258	205	233	328	307	320	287	258	268
30				222	205	211	347	322	332	289	268	278
31				248	222	237	356	332	339	---	---	---
MONTH				258	205	227	356	219	284	333	200	278

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	9.0	2.0	2.0	.0	.0	7.0	14.5	18.5	22.0	23.5	25.0
2	17.0	10.0	2.0	1.5	.0	.0	5.5	15.0	18.0	21.0	27.0	22.5
3	16.5	8.0	1.5	.5	.0	.0	7.0	15.0	17.0	26.0	25.0	23.0
4	20.0	8.0	2.0	.5	.0	.0	6.5	15.5	17.0	25.0	27.0	26.0
5	16.0	8.0	2.0	.0	.0	.5	7.0	15.0	19.5	24.5	26.0	24.0
6	15.0	8.0	3.5	.5	.0	.5	8.0	14.0	21.5	22.0	26.0	25.5
7	12.5	8.0	3.0	.5	.5	.5	8.0	14.0	21.0	27.0	28.0	23.0
8	11.0	7.0	3.0	.0	.0	.5	10.0	13.0	17.0	22.0	28.5	24.0
9	9.0	8.0	2.0	.0	.0	.5	9.0	11.0	15.0	24.0	27.5	23.0
10	8.0	10.0	2.0	.5	.0	1.0	9.0	15.5	15.5	23.0	28.0	22.5
11	8.5	7.0	4.0	1.0	.0	1.0	9.0	16.0	17.0	23.0	28.0	24.0
12	8.0	6.0	6.0	1.0	.5	.5	8.0	16.0	21.0	22.5	27.0	18.0
13	7.0	6.0	2.0	1.0	.5	.5	8.5	13.0	21.0	23.0	26.0	18.0
14	7.0	6.5	1.5	1.0	.0	.5	8.0	14.0	26.0	24.0	23.0	17.5
15	7.0	4.5	2.0	1.0	.5	.0	7.5	15.0	17.0	26.0	23.0	19.0
16	7.5	4.0	2.0	1.0	.0	.0	7.0	16.0	22.0	29.0	23.0	19.0
17	8.0	4.0	.5	2.0	.0	1.0	5.0	17.0	21.0	28.0	22.0	18.5
18	10.0	6.0	.5	2.5	.0	1.0	7.0	16.0	21.0	30.5	20.0	19.5
19	10.5	6.0	.5	2.0	1.0	2.0	11.0	17.5	26.0	27.0	23.0	19.0
20	13.5	8.0	.0	1.0	1.0	4.0	11.0	20.0	17.0	24.0	28.0	20.0
21	12.0	8.0	1.0	.5	1.0	2.5	12.0	20.0	17.0	24.0	28.0	22.0
22	18.0	9.0	1.0	.5	.5	2.0	12.0	21.0	23.0	21.0	26.5	22.0
23	17.0	9.0	1.0	.5	1.0	2.5	11.0	21.0	26.0	21.0	26.0	22.0
24	12.0	10.0	3.0	.0	1.0	3.0	11.0	23.0	28.0	23.0	27.0	17.0
25	8.0	9.0	3.0	.0	.5	2.0	9.5	23.0	28.0	25.5	28.0	15.5
26	6.0	13.0	3.0	.0	.0	3.0	10.0	20.5	29.0	25.0	26.0	12.0
27	6.0	9.0	2.5	.5	.0	5.0	12.5	19.0	22.5	27.0	28.0	13.0
28	7.0	7.0	2.0	.0	.0	7.0	11.0	20.0	21.0	24.5	28.0	14.0
29	7.0	3.0	1.5	.0	.0	4.5	10.0	22.0	19.0	24.0	27.0	15.0
30	8.0	1.0	4.0	.0	---	5.0	12.0	21.5	20.0	25.0	26.0	18.0
31	10.0	---	4.5	.0	---	5.0	---	20.0	---	27.0	24.0	---
MEAN	11.0	7.5	2.0	.5	.5	2.0	9.0	17.0	21.0	24.5	26.0	20.0

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	22.5	21.0	21.5	22.0	20.5	21.5
2				---	---	---	24.0	20.0	22.0	22.5	20.5	21.5
3				---	---	---	23.5	21.5	22.0	22.5	19.0	20.5
4				---	---	---	24.0	20.0	22.0	22.5	18.5	20.5
5				---	---	---	24.0	20.0	22.0	22.5	19.5	21.0
6				---	---	---	24.0	21.5	22.5	22.0	18.0	20.5
7				---	---	---	25.5	21.5	23.5	21.5	17.5	19.5
8				---	---	---	25.5	22.5	24.5	20.5	17.0	19.0
9				---	---	---	25.0	22.0	23.5	18.5	16.0	17.5
10				---	---	---	24.0	20.5	22.5	18.0	15.5	17.0
11				---	---	---	24.0	20.0	22.0	19.5	15.0	17.0
12				---	---	---	23.5	21.5	22.5	18.0	15.0	16.5
13				---	---	---	22.5	20.5	21.5	18.5	15.0	16.5
14				---	---	---	21.5	20.0	21.0	18.0	16.0	17.5
15				---	---	---	22.0	19.5	20.5	17.5	14.5	16.0
16				---	---	---	21.0	18.0	19.5	17.5	14.5	16.0
17				---	---	---	22.0	16.5	19.5	17.5	15.5	16.5
18				---	---	---	21.0	18.0	20.0	17.5	14.5	15.5
19				---	---	---	22.0	19.0	20.5	16.0	14.0	15.0
20				---	---	---	23.5	19.5	21.5	18.5	14.0	16.0
21				---	---	---	23.5	20.0	21.5	20.0	16.5	18.5
22				---	---	---	22.5	19.0	21.0	20.5	18.5	19.5
23				---	---	---	24.0	20.0	21.5	20.0	17.0	19.0
24				---	---	---	24.5	20.0	22.0	17.5	14.5	15.5
25				---	---	---	24.0	20.0	22.0	15.0	13.5	14.0
26				---	---	---	21.5	20.0	21.0	14.0	11.0	13.0
27				---	---	---	23.0	20.0	21.5	12.0	9.0	10.5
28				---	---	---	24.0	19.5	21.0	13.5	10.5	12.0
29				21.5	19.5	21.0	23.5	19.0	21.0	14.0	10.5	12.0
30				23.5	19.5	21.0	24.5	20.5	22.0	16.0	11.5	13.5
31				23.5	19.5	22.0	22.5	21.5	22.0	---	---	---
MONTH				23.5	19.5	21.5	25.5	16.5	21.5	22.5	9.0	17.0

04252000 BLACK RIVER CANAL (FLOWING SOUTH) NEAR BOONVILLE, NY

LOCATION.--Lat 43°27'21", long 75°19'27", Oneida County, Hydrologic Unit 04150101, on left bank at former lock 69, 200 ft (61 m) downstream from bridge on State Highway 46, and 2.0 mi (3.2 km) south of Boonville.

PERIOD OF RECORD.--September 1915 to September 1980 (discontinued) (canal seasons only prior to October 1942 and since October 1957).

REVISED RECORDS.--WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,105.56 ft (336.975 m) National Geodetic Vertical Datum of 1929. Prior to June 7, 1929, station was operated as a slope station on summit level of canal. Auxiliary water-stage recorder with concrete control on right bank of Lansing Kill spillway, 100 ft (30 m) downstream from spillway and headgate, 600 ft (183 m) upstream from lock 70, and 0.3 mi (0.5 km) upstream from lock 69.

REMARKS.--Records poor. This record shows combined flow in Black River Canal and Lansing Kill spillway, and represents total diversion from Black River at Forestport, through Forestport feeder, into Mohawk River basin. Discharge during periods when no water was diverted, made up of leakage through headgates and runoff from area draining into canal above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge recorded, 323 ft³/s (9.15 m³/s) Nov. 1915; practically no flow at times when no water is being diverted.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	33					---	4.5	4.0	1.5	16	28
2	37	34					---	4.0	5.3	1.1	8.1	33
3	36	37					---	4.4	5.9	.98	5.9	37
4	34	35					---	4.1	7.6	.82	7.5	33
5	33	35					---	3.9	2.8	.82	6.2	31
6	38	36					---	3.5	2.0	.74	5.5	30
7	36	35					---	3.3	2.8	.67	4.3	30
8	34	36					---	3.2	5.4	.67	10	28
9	34	32					---	3.0	3.4	.83	16	29
10	33	11					---	2.8	2.4	.93	19	29
11	33	5.2					---	3.0	2.2	.99	24	29
12	33	3.3					---	3.2	2.0	.99	23	28
13	37	2.9					---	3.0	1.7	.80	24	27
14	38	2.9					---	3.8	1.8	.60	25	30
15	37	2.7					---	3.4	1.8	.46	26	30
16	36	2.2					---	2.8	2.5	.48	27	23
17	35	1.6					---	2.5	1.1	.48	33	9.3
18	34	1.7					---	6.6	1.1	.48	31	4.6
19	34	1.6					---	8.0	2.1	.68	28	3.7
20	34	1.5					---	5.1	1.7	.77	27	3.4
21	34	1.5					---	4.0	1.4	.89	27	3.4
22	34	1.5					---	3.2	1.3	.74	26	3.2
23	32	1.4					---	2.8	8.9	.74	27	1.4
24	34	1.4					2.8	2.5	5.2	.73	28	.16
25	34	1.4					.77	2.5	23	.55	27	.14
26	34	1.7					.83	2.4	5.6	.60	27	.13
27	33	2.3					.77	2.4	3.3	.73	27	.16
28	33	1.5					7.5	2.4	1.9	.80	27	.13
29	33	1.4					16	2.2	1.6	1.3	27	.16
30	33	1.3					8.2	2.2	1.6	8.1	28	.19
31	33	---					---	3.4	---	22	30	---
TOTAL	1070	365.0					---	108.1	113.4	52.97	667.5	505.07
MEAN	34.5	12.2					---	3.49	3.78	1.71	21.5	16.8
MAX	38	37					---	8.0	23	22	33	37
MIN	32	1.3					---	2.2	1.1	.46	4.3	.13

04252500 BLACK RIVER NEAR BOONVILLE, NY

LOCATION.--Lat 43°30'42", long 75°18'25", Oneida County, Hydrologic Unit 04150101, on left bank at downstream side of bridge on Moose River Road, 0.8 mi (1.3 km) upstream from Sugar River, and 2 mi (3 km) northeast of Boonville.

DRAINAGE AREA.--295 mi^2 (764 km^2).

PERIOD OF RECORD.--January 1911 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934. WSP 1084: 1912(M), 1913, 1917-1919(M), 1922(M), 1924(M), 1926(M), 1928(M), 1930(M), 1933(M). WSP 1307: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 935.50 ft (285.140 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by several headwater reservoirs. Forestport feeder diverts water from State Pond at Forestport 9 mi (14 km) upstream. That portion of diverted water which does not pass Black River Canal (flowing south), see station 04252000, returns to Black River below station through Mill Creek sluiceway. Slight diurnal fluctuation at medium and low flow caused by mill above station.

AVERAGE DISCHARGE.--69 years, 699 ft^3/s (19.80 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft^3/s (351 m^3/s) Mar. 28, 1913, gage height, about 12.5 ft (3.81 m), from floodmarks; minimum observed, about 5 ft^3/s (0.14 m^3/s) Aug. 26, 1918, gage height, 2.40 ft (0.732 m); minimum daily, 7 ft^3/s (0.20 m^3/s) Aug. 26, 1918.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,900 ft^3/s (110 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	1445	ice jam		*9.85	3.002	Apr. 10	1730	*4,490	127	8.82	2.688

Minimum discharge, 93.4 ft^3/s (2.64 m^3/s) Aug. 30, gage height, 3.55 ft (1.082 m); minimum daily, 107 ft^3/s (3.03 m^3/s) Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	382	818	400	310	290	1870	978	298	250	261	227
2	233	395	641	350	330	320	1820	806	692	250	236	455
3	222	669	541	300	350	300	1700	733	1090	256	258	912
4	208	751	532	260	330	300	2020	613	1510	233	390	602
5	219	597	523	260	320	300	2990	551	1120	219	343	362
6	481	490	513	280	300	290	2410	523	727	253	311	370
7	1020	437	565	310	280	280	1880	537	739	247	358	258
8	1020	468	608	310	280	280	1900	513	1160	253	324	208
9	906	518	509	350	280	270	2690	504	1240	350	279	190
10	641	1110	495	360	270	270	4170	509	849	286	407	203
11	468	1430	486	380	270	270	3730	499	630	233	236	195
12	433	1030	586	440	270	260	2700	504	537	203	195	174
13	551	800	1150	540	270	270	2430	463	518	190	179	167
14	663	710	840	680	270	340	2190	523	459	179	185	222
15	591	669	620	1200	270	340	2250	509	386	174	190	289
16	652	641	500	1000	270	310	2310	446	407	172	145	298
17	663	630	440	700	270	290	1730	407	382	172	145	270
18	608	613	380	600	270	520	1390	477	324	169	152	308
19	556	613	360	520	270	640	1070	837	292	164	150	314
20	468	537	350	450	270	840	919	782	441	190	152	276
21	428	499	360	400	270	1100	837	541	824	575	147	258
22	354	472	370	360	270	2100	739	455	721	998	140	253
23	330	450	400	330	270	3600	681	407	490	721	152	270
24	378	441	450	310	270	2970	619	374	317	546	145	317
25	450	523	919	300	270	2600	646	382	279	343	135	295
26	477	887	1750	320	270	1990	763	320	261	253	128	256
27	441	2400	1390	350	270	1340	739	279	241	239	110	264
28	407	2440	951	360	270	1180	704	264	233	253	107	256
29	386	1630	849	350	280	1480	1070	256	230	256	117	233
30	416	1220	751	330	---	2190	1140	253	236	295	117	208
31	411	---	540	300	---	2240	---	250	---	295	200	---
TOTAL	15325	24452	20187	13400	8190	29770	52107	15495	17633	9217	6394	8910
MEAN	494	815	651	432	282	960	1737	500	588	297	206	297
MAX	1020	2440	1750	1200	350	3600	4170	978	1510	998	407	912
MIN	208	382	350	260	270	260	619	250	230	164	107	167

CAL YR 1979 TOTAL 302605 MEAN 829 MAX 5230 MIN 141
WTR YR 1980 TOTAL 221080 MEAN 604 MAX 4170 MIN 107

04254375 PANTHER LAKE OUTLET NEAR OLD FORGE, NY

LOCATION.--Lat 43°41'05", long 74°55'08", Herkimer County, Hydrologic Unit 04150101, on left bank, 0.1 mi (0.2 km) upstream from Little Moose Lake, 0.2 mi (0.3 km) downstream from outlet of Panther Lake, and about 3.2 mi (5.2 km) southeast of Old Forge.

DRAINAGE AREA.--0.48 mi^2 (1.24 km^2).

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,820 ft (555 m), from topographic map.

REMARKS.--Records fair except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.7 ft^3/s (0.16 m^3/s) Apr. 1, 1979, gage height, 2.02 ft (0.616 m); maximum gage height, 6.14 ft (1.871 m) Mar. 12, 1979, ice jam; minimum discharge, 0.13 ft^3/s (0.004 m^3/s) July 12-14, 15, 18, 26, 27, 1978, gage height, 1.01 ft (0.308 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.2 ft^3/s (0.12 m^3/s) Apr. 10, gage height, 2.03 ft (0.619 m); minimum daily, 0.19 ft^3/s (0.005 m^3/s) Aug. 26, 28-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	.85	2.5	.96	.60	.52	1.6	1.2	.75	.47	.75	.35
2	.65	.89	2.3	.90	.58	.52	1.6	1.1	.85	.47	.61	.93
3	.61	1.0	2.1	.86	.56	.52	1.6	1.1	1.6	.47	.61	1.2
4	.61	1.0	1.9	.80	.54	.54	1.9	.93	2.2	.44	.58	1.1
5	.61	1.1	1.9	.76	.54	.56	2.5	.82	2.1	.42	.58	.97
6	1.0	1.1	1.7	.72	.54	.56	2.3	.78	1.7	.44	.71	.82
7	.85	1.1	1.7	.70	.54	.54	2.2	.75	1.7	.37	.61	.75
8	.78	1.1	1.7	.66	.52	.52	2.3	.71	1.8	.42	.55	.65
9	.75	1.1	1.6	.62	.52	.50	3.4	.68	2.0	.44	.50	.65
10	.75	1.5	1.6	.60	.50	.49	4.1	.68	1.8	.39	.47	.65
11	.68	1.6	1.6	1.0	.50	.50	3.8	.71	1.6	.39	.44	.55
12	.68	1.5	1.6	1.7	.50	.52	3.4	.68	1.4	.35	.47	.53
13	.78	1.4	1.9	1.5	.50	.54	3.3	.68	1.2	.35	.47	.50
14	.82	1.3	1.7	1.4	.48	.58	3.0	.71	1.1	.33	.44	.85
15	.85	1.3	1.6	1.2	.47	.62	3.3	.68	.97	.30	.44	.78
16	.97	1.2	1.5	1.1	.48	.70	3.1	.65	.97	.55	.37	.75
17	1.0	1.1	1.4	1.0	.49	.82	2.7	.65	.85	.53	.37	.78
18	1.1	1.1	1.3	.96	.50	.96	2.4	.65	.82	.50	.35	.78
19	1.0	1.1	1.2	.88	.52	1.2	2.2	.68	.75	.47	.33	.68
20	1.0	.89	1.1	.82	.54	1.6	2.0	.65	.89	.53	.33	.65
21	.97	.85	1.1	.80	.54	2.6	1.8	.65	.85	1.4	.30	.65
22	.97	.89	1.1	.76	.56	2.7	1.6	.58	.78	1.4	.28	.61
23	.93	.93	1.1	.72	.56	2.4	1.4	.55	.75	1.3	.28	.65
24	.97	.93	1.3	.70	.56	2.1	1.3	.55	.71	1.1	.25	.55
25	.97	1.1	1.7	.68	.54	2.0	1.3	.53	.61	.93	.22	.50
26	.97	1.8	2.1	.68	.54	1.7	1.3	.47	.53	.82	.19	.50
27	.93	3.2	1.8	.66	.54	1.4	1.2	.44	.50	.97	.21	.47
28	.89	3.1	1.5	.66	.52	1.3	1.2	.42	.50	.82	.19	.44
29	.93	2.9	1.3	.64	.52	1.4	1.2	.39	.50	.89	.19	.39
30	.89	2.8	1.1	.62	---	1.6	1.2	.39	.47	.93	.23	.35
31	.89	---	1.0	.62	---	1.6	---	.61	---	.89	.37	---
TOTAL	26.48	41.73	49.0	26.68	15.30	34.11	66.2	21.07	33.25	20.08	12.69	20.03
MEAN	.85	1.39	1.58	.86	.53	1.10	2.21	.68	1.11	.65	.41	.67
MAX	1.1	3.2	2.5	1.7	.60	2.7	4.1	1.2	2.2	1.4	.75	1.2
MIN	.61	.85	1.0	.60	.47	.49	1.2	.39	.47	.30	.19	.35
CFSM	1.77	2.90	3.29	1.79	1.10	2.29	4.60	1.42	2.31	1.35	.85	1.40
IN.	2.05	3.23	3.79	2.06	1.18	2.64	5.12	1.63	2.57	1.55	.98	1.55

CAL YR 1979 TOTAL 489.42 MEAN 1.34 MAX 5.6 MIN .28 CFSM 2.79 IN 37.85
WTR YR 1980 TOTAL 366.62 MEAN 1.00 MAX 4.1 MIN .19 CFSM 2.08 IN 28.35

04256000 INDEPENDENCE RIVER AT DONNATTSBURG, NY

LOCATION.--Lat 43°44'50", long 75°20'05", Lewis County, Hydrologic Unit 04150101, on right bank at downstream side of highway bridge on Donnattsburg Road at Donnattsburg, 1.2 mi (1.9 km) downstream from Chase Lake Outlet, 4.2 mi (6.8 km) northeast of Glenfield, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--91.7 mi^2 (238 km^2).

PERIOD OF RECORD.--July 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 972.84 ft (296.522 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--38 years, 191 ft^3/s (5.409 m^3/s), 28.27 in/yr (718 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,450 ft^3/s (97.7 m^3/s) May 20, 1969, gage height, 8.72 ft (2.658 m) from rating curve extended above 2,000 ft^3/s (56.6 m^3/s); minimum observed, 18 ft^3/s (0.51 m^3/s) Sept. 17, 1948, Aug. 4, 5, 1949, gage height, 2.85 ft (0.869 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Nov. 27	1900	1,290	36.5	6.16	1.878
Apr. 10	1000	*1,810	51.2	*6.87	2.094

Minimum discharge, 34 ft^3/s (0.95 m^3/s) Aug. 30, gage height, 3.11 ft (0.948 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	159	278	110	60	54	578	214	132	66	142	55
2	69	153	236	92	58	54	491	186	195	64	110	72
3	66	233	196	80	56	52	403	170	217	61	104	116
4	63	239	181	68	56	52	409	151	355	55	99	103
5	63	187	170	62	54	50	780	134	298	51	95	78
6	156	156	175	60	54	50	633	126	221	48	179	61
7	344	141	212	58	52	50	430	127	210	46	203	54
8	337	148	222	58	50	49	434	125	299	51	139	46
9	293	151	184	58	50	48	730	122	370	61	102	41
10	287	222	175	64	50	49	1650	137	384	68	81	44
11	242	330	170	78	49	50	906	126	264	53	69	44
12	193	265	225	90	49	52	546	116	195	46	70	41
13	193	202	384	88	49	56	560	112	146	41	72	38
14	233	178	330	100	50	58	520	127	117	41	74	69
15	233	167	239	110	50	56	546	127	111	38	74	152
16	290	156	190	100	50	56	678	115	128	63	76	120
17	290	141	130	96	52	54	438	104	121	105	74	91
18	253	136	110	90	52	56	331	98	97	78	67	113
19	225	136	110	86	52	58	278	114	82	62	60	126
20	193	131	110	80	50	84	242	132	87	57	55	100
21	196	124	110	76	50	120	218	118	125	138	52	82
22	175	129	100	72	50	300	191	103	117	340	49	74
23	151	218	100	70	50	721	168	92	96	629	45	74
24	159	236	110	68	50	684	152	83	80	442	43	72
25	205	271	140	66	50	590	161	75	69	259	41	65
26	193	547	170	66	52	491	241	68	61	166	39	64
27	164	1150	160	66	54	367	235	62	57	234	38	116
28	146	852	150	64	54	334	208	59	55	272	38	126
29	161	472	140	64	54	449	241	55	52	188	36	97
30	202	351	130	62	---	651	242	53	56	227	38	79
31	181	---	120	60	---	744	---	59	---	196	40	---
TOTAL	6028	7981	5457	2362	1507	6549	13640	3490	4797	4246	2404	2413
MEAN	194	266	176	76.2	52.0	211	455	113	160	137	77.5	80.4
MAX	344	1150	384	110	60	744	1650	214	384	629	203	152
MIN	63	124	100	58	49	48	152	53	52	38	36	38
CFSM	2.12	2.90	1.92	.83	.57	2.30	4.96	1.23	1.75	1.49	.85	.88
IN.	2.45	3.24	2.21	.96	.61	2.66	5.53	1.42	1.95	1.72	.98	.98

CAL YR 1979 TOTAL 79172 MEAN 217 MAX 2120 MIN 30 CFSM 2.37 IN 32.12
WTR YR 1980 TOTAL 60874 MEAN 166 MAX 1650 MIN 36 CFSM 1.81 IN 24.69

04256484 WOODS LAKE NEAR BIG MOOSE, NY

LOCATION.--Lat 43°51'57", long 74°57'20", Herkimer County, Hydrologic Unit 04150101, on left bank, just upstream from dam at lake outlet and 3.6 mi (5.8 km) northwest of Big Moose.

DRAINAGE AREA.--0.80 mi² (2.07 km²).

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,990 ft (607 m), from topographic map.

REMARKS.--Lake level maintained by log and cobble dam at outlet. Area of water surface, 0.10 mi² (0.259 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 2.12 ft (0.646 m) Oct. 27, 28, 1978; minimum, 0.31 ft (.094 m) July 25, 26, 1979. May have been higher or lower during periods of missing record.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 1.12 ft (0.341 m) Apr. 9; minimum 0.42 ft (0.128 m) Feb. 23-26.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	.65	.70	.63	.56	.44	.78	.63	.67	.54	.65	.55
2	.54	.65	.66	.62	.54	.44	.77	.63	.70	.53	---	.60
3	.55	.68	.63	.61	.53	.43	.73	.62	.74	.54	---	.64
4	.56	.68	.61	.60	.53	.43	.76	.60	.81	.53	---	.63
5	.56	.67	.60	.59	.52	.43	.86	.59	.76	.52	---	.62
6	.66	.65	.59	.59	.52	.44	.79	.59	.70	.51	.64	.60
7	.69	.64	.61	.57	.52	.44	.75	.58	.68	.49	---	.58
8	.71	.64	.64	.58	.51	.46	.80	.57	.69	.51	---	.56
9	.73	.64	.64	.58	.51	.47	1.00	.57	.76	.53	---	.55
10	.75	.72	.64	.58	.51	.47	1.05	.57	.74	.52	---	.56
11	.74	.74	.61	.60	.50	.48	.90	.56	.69	.51	---	.55
12	.71	.72	.68	.76	.50	.42	.81	.56	.65	.51	.55	.54
13	.71	.68	.79	.75	.50	.39	.86	.57	.63	.50	---	.52
14	.72	.67	.76	.72	.50	.44	.80	.58	.62	.49	---	.63
15	.71	.64	.71	.71	.50	.43	.85	.58	.62	.48	---	.68
16	.75	.63	.67	.69	.50	.42	.84	.58	.63	.54	---	.68
17	.75	.62	.66	.66	.49	.42	.76	.57	.62	.56	---	.69
18	.74	.61	.64	.64	.48	.55	.71	.57	.60	.56	.55	.73
19	.70	.61	.62	.63	.46	.58	.67	.64	.60	.55	---	.74
20	.68	.61	.60	.62	.45	.58	.65	.66	.63	.54	---	.74
21	.68	.61	.59	.61	.44	.62	.64	.64	.64	.60	---	.75
22	.67	.62	.58	.61	.44	.83	.62	.63	.64	.69	---	.79
23	.65	.66	.58	.61	.42	.80	.60	.61	.64	.77	---	.79
24	.67	.67	.61	.59	.42	.73	.60	.60	.63	.74	---	.71
25	.68	.70	.74	.59	.42	.72	.60	.58	.62	.68	---	.65
26	.68	.83	.85	.59	.42	.70	.62	.54	.60	.64	.49	.67
27	.66	1.01	.80	.58	.43	.65	.63	.52	.56	.65	.48	.68
28	.64	.88	.73	.58	.44	.63	.62	.50	.54	.63	.48	.66
29	.66	.79	.69	.58	.44	.68	.63	.50	.53	.63	.48	.63
30	.66	.75	.66	.58	---	.76	.63	.48	.53	.66	.48	.62
31	.66	---	.65	.57	---	.82	---	.51	---	.64	.53	---
MEAN	.67	.69	.66	.62	.48	.55	.74	.58	.65	.57	---	.64
MAX	.75	1.01	.85	.76	.56	.83	1.05	.66	.81	.77	---	.79
MIN	.54	.61	.58	.57	.42	.39	.60	.48	.53	.48	---	.52

04256485 WOODS LAKE OUTLET NEAR BIG MOOSE, NY

LOCATION.--43°51'57", long 74°57'20", Herkimer County, Hydrologic Unit 04150101, on right bank 45 ft (14 m) downstream from dam on Woods Lake.

DRAINAGE AREA.--0.80 mi^2 (2.07 km^2).

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,980 ft (604 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69 ft^3/s (1.95 m^3/s) Oct. 30, 1978, gage height, 2.18 ft (0.664 m), from rating curve extended above 15 ft^3/s (0.42 m^3/s); minimum, 0.01 ft^3/s (<0.001 m^3/s) many days in 1978 and 1979; minimum gage-height recorded, 0.95 ft (0.290 m) June 25, 1979, but may have been less during period of doubtful gage-height record July 11-30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16 ft^3/s (0.453 m^3/s) Aug. 9, gage height, 1.95 ft (0.594 m); minimum, 0.01 ft^3/s (<0.001 m^3/s) May 30, 31; minimum gage height 1.00 ft (0.305 m) Aug. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	1.3	2.9	1.1	.38	.24	4.6	1.1	1.0	.27	1.0	.20
2	.17	1.5	2.2	1.0	.35	.24	4.3	.95	1.5	.23	1.1	.40
3	.25	2.8	1.8	.88	.33	.23	3.8	.88	2.1	.15	.88	1.0
4	.33	3.3	1.6	.75	.31	.22	4.6	.70	3.6	.12	.70	.58
5	.46	2.8	1.5	.62	.27	.29	6.5	.58	2.6	.09	.58	.46
6	2.1	2.3	1.3	.52	.27	.43	4.3	.75	1.6	.08	1.2	.27
7	2.4	1.9	1.4	.52	.25	.46	3.6	.75	1.6	.03	1.3	.15
8	2.4	1.8	1.7	.70	.23	.62	4.3	.66	1.7	.04	.75	.07
9	2.2	1.7	1.6	.75	.23	.70	9.2	.62	2.7	.16	.43	.04
10	2.4	2.5	1.6	.70	.23	.58	14	.62	2.4	.09	.19	.12
11	2.4	4.7	1.3	.88	.22	.62	9.2	.52	1.7	.10	.08	.06
12	2.1	3.5	2.1	4.0	.25	.49	5.8	.52	1.2	.12	.27	.04
13	2.2	2.8	3.8	3.8	.25	.49	7.7	.58	.81	.05	.46	.04
14	2.2	2.2	3.6	2.7	.31	1.2	5.5	.70	.55	.02	.35	.23
15	2.1	1.8	2.4	2.7	.28	1.3	7.7	.58	.52	.02	.66	.33
16	2.7	1.6	1.8	2.1	.27	.81	6.5	.62	.58	.49	.52	.25
17	2.9	1.4	1.6	1.5	.27	.75	3.8	.49	.33	.31	.33	.23
18	2.7	1.3	1.5	1.1	.26	2.7	2.2	.58	.22	.31	.20	.46
19	2.2	1.2	1.2	1.0	.26	2.7	1.7	1.4	.20	.22	.20	.33
20	2.1	1.1	.95	1.0	.27	2.0	1.5	1.4	.40	.19	.12	.31
21	2.1	1.1	.88	.88	.25	2.6	1.3	1.1	.55	1.0	.09	.29
22	1.7	1.3	.70	.81	.29	6.9	1.0	.81	.46	2.7	.06	.40
23	1.6	1.8	.70	.78	.38	5.8	.81	.75	.40	4.3	.06	1.8
24	2.1	2.1	.88	.72	.35	4.0	.70	.66	.33	3.1	.04	2.7
25	2.1	2.6	2.9	.68	.31	4.0	.88	.58	.27	2.0	.03	1.4
26	1.7	5.5	4.8	.62	.29	3.3	1.0	.35	.38	1.3	.03	1.1
27	1.5	9.7	4.0	.58	.27	2.6	1.0	.25	.52	1.6	.03	2.0
28	1.2	5.8	2.9	.52	.26	2.1	1.0	.17	.29	1.2	.02	1.7
29	1.2	4.0	2.1	.49	.25	3.6	1.2	.09	.20	1.3	.02	1.2
30	1.2	3.8	1.6	.46	---	4.8	1.2	.28	.20	1.6	.09	.95
31	1.1	---	1.4	.42	---	5.5	---	.64	---	1.2	.29	---
TOTAL	53.97	81.2	60.71	35.28	8.14	62.27	120.89	20.68	30.91	24.39	12.08	19.11
MEAN	1.74	2.71	1.96	1.14	.28	2.01	4.03	.67	1.03	.79	.39	.64
MAX	2.9	9.7	4.8	4.0	.38	6.9	14	1.4	3.6	4.3	1.3	2.7
MIN	.16	1.1	.70	.42	.22	.22	.70	.09	.20	.02	.02	.04
CFSM	2.18	3.39	2.45	1.43	.35	2.51	5.04	.84	1.29	.99	.49	.80
IN.	2.51	3.77	2.82	1.64	.38	2.89	5.61	.96	1.44	1.13	.56	.89

CAL YR 1979 TOTAL 689.91 MEAN 1.89 MAX 13 MIN .01 CFSM 2.36 IN 32.04
WTR YR 1980 TOTAL 529.63 MEAN 1.45 MAX 14 MIN .02 CFSM 1.81 IN 24.60

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam on Beaver River, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 mi^2 (445 km^2).

PERIOD OF RECORD.--May 1908 to current year. Prior to February 1925, monthend contents only, published in WSP 1307. February 1925 to September 1937, published in WSP 824.

GAGE.--Nonrecording gage read once daily and prior to reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912.

REMARKS.--Reservoir originally formed about 1885; enlarged at various times and in 1924 enlarged to a usable capacity of 4,623 mil ft^3 (131 hm^3) between elevations 1,650.3 ft (503.01 m) and 1,679.3 ft (511.85 m) (top of 24-inch flashboards in place throughout year). Elevation of gate sill of lowest outlet, 1,642.3 ft (500.57 m). Capacity below elevation 1,650.3 ft (503.01 m), 90 mil ft^3 (2.55 hm^3), is included in records presented herein, but is not ordinarily available for release. Reservoir is used to regulate flow of Beaver and Black Rivers for flood control, power development, and general public welfare.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 1,680.08 ft (512.088 m) May 29, 1969, contents, 4,939 mil ft^3 (140 hm^3); minimum observed since first filling, 1,644.80 ft (501.335 m) Mar. 25-27, 1949, contents, 8 mil ft^3 (0.227 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,678.15 ft (511.500 m) June 17, 22, contents, 4,385 mil ft^3 (124 hm^3); minimum observed, 1,661.52 ft (506.431 m) Mar. 19, contents, 1,010 mil ft^3 (28.6 hm^3).

Capacity table, current year (elevation, in feet, and contents, in millions of cubic feet)

1,658.0	604	1,670.0	2,431
1,660.0	821	1,675.0	3,556
1,665.0	1,518	1,680.0	4,916

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1669.91	1670.29	1671.34	1670.83	1668.30	1664.25	1666.76	1676.22	1676.84	1677.78	1677.15	1674.28
2	1669.82	1670.19	1671.43	1670.79	1668.19	1664.08	1667.20	1676.27	1676.93	1677.73	1677.09	1674.12
3	1669.75	1670.25	1671.43	1670.69	1668.08	1663.88	1667.58	1676.33	1676.97	1677.63	1677.12	1674.04
4	1669.66	1670.28	1671.39	1670.56	1667.98	1663.70	1667.96	1676.34	1677.13	1677.58	1677.14	1673.96
5	1669.58	1670.29	1671.37	1670.43	1667.87	1663.51	1668.56	1676.40	1677.23	1677.60	1677.08	1673.85
6	1669.53	1670.19	1671.30	1670.28	1667.74	1663.35	1669.05	1676.42	1677.32	1677.62	1677.03	1673.78
7	1669.70	1670.09	1671.28	1670.13	1667.62	1663.17	1669.41	1676.47	1677.43	1677.62	1676.96	1673.69
8	1669.77	1670.00	1671.16	1670.03	1667.50	1663.00	1669.76	1676.48	1677.50	1677.52	1676.87	1673.58
9	1669.81	1669.91	1671.28	1669.88	1667.38	1662.85	1670.30	1676.51	1677.65	1677.43	1676.78	1673.48
10	1669.84	1669.90	1671.33	1669.74	1667.24	1662.68	1671.24	1676.53	1677.78	1677.33	1676.68	1673.38
11	1669.85	1670.05	1671.24	1669.60	1667.12	1662.53	1671.89	1676.55	1677.86	1677.20	1676.58	1673.20
12	1669.85	1670.12	1671.18	1669.67	1666.99	1662.34	1672.32	1676.57	1677.90	1677.13	1676.50	1673.04
13	1669.92	1670.05	1671.26	1669.64	1666.88	1662.17	1672.78	1676.58	1677.95	1677.10	1676.45	1672.86
14	1670.08	1669.98	1671.25	1669.63	1666.76	1662.05	1673.23	1676.63	1678.00	1677.07	1676.38	1672.78
15	1670.15	1669.90	1671.21	1669.61	1666.65	1661.89	1673.67	1676.63	1678.05	1676.93	1676.32	1672.72
16	1670.27	1669.82	1671.15	1669.56	1666.55	1661.72	1674.15	1676.65	1678.14	1676.88	1676.22	1672.59
17	1670.35	1669.72	1671.10	1669.49	1666.44	1661.55	1674.47	1676.67	1678.15	1676.80	1676.15	1672.44
18	1670.39	1669.73	1671.02	1669.39	1666.32	1661.57	1674.72	1676.68	1678.13	1676.73	1676.06	1672.38
19	1670.43	1669.74	1670.92	1669.30	1666.14	1661.52	1674.94	1676.73	1678.12	1676.62	1675.97	1672.27
20	1670.49	1669.63	1670.81	1669.25	1665.97	1661.71	1675.13	1676.80	1678.13	1676.61	1675.87	1672.13
21	1670.65	1669.54	1670.67	1669.20	1665.79	1661.93	1675.31	1676.82	1678.13	1676.65	1675.78	1672.00
22	1670.78	1669.44	1670.56	1669.14	1665.62	1662.51	1675.45	1676.83	1678.15	1676.63	1675.65	1671.93
23	1670.81	1669.50	1670.49	1669.09	1665.56	1663.04	1675.53	1676.84	1678.14	1676.88	1675.53	1671.89
24	1670.85	1669.53	1670.46	1669.03	1665.29	1663.50	1675.58	1676.85	1678.12	1677.08	1675.42	1671.78
25	1670.80	1669.59	1670.52	1668.95	1665.13	1663.93	1675.67	1676.87	1678.05	1677.16	1675.30	1671.63
26	1670.74	1669.83	1670.71	1668.87	1664.94	1664.31	1675.74	1676.82	1677.99	1677.21	1675.18	1671.49
27	1670.65	1670.12	1670.86	1668.77	1664.77	1664.61	1675.83	1676.80	1677.94	1677.31	1675.05	1671.49
28	1670.58	1670.66	1670.91	1668.68	1664.62	1664.88	1675.91	1676.78	1677.89	1677.37	1674.90	1671.37
29	1670.53	1670.97	1670.92	1668.60	1664.43	1665.25	1675.98	1676.75	1677.84	1677.29	1674.75	1671.28
30	1670.46	1671.20	1670.90	1668.50	---	1665.74	1676.10	1676.73	1677.79	1677.27	1674.53	1671.16
31	1670.38	---	1670.87	1668.40	---	1666.30	---	1676.70	---	1677.22	1674.40	---
MEAN	1670.21	1670.02	1671.04	1669.54	1666.55	1663.21	1672.74	1676.62	1677.78	1677.19	1676.09	1672.69
MAX	1670.85	1671.20	1671.43	1670.83	1668.30	1666.30	1676.10	1676.87	1678.15	1677.78	1677.15	1674.28
MIN	1669.53	1669.44	1670.46	1668.40	1664.43	1661.52	1666.76	1676.22	1676.84	1676.61	1674.40	1671.16
*	2498	2697	2606	2107	1414	1775	3850	4009	4282	4121	3395	2664
**	+85	+199	-91	-499	-693	+361	+2075	+159	+273	-161	-726	-731

CAL YR 1979 TOTAL 609829.09 MEAN 1670.76 MAX 1679.33 MIN 1659.69 ** 35.7
WTR YR 1980 TOTAL 611947.51 MEAN 1671.99 MAX 1678.15 MIN 1661.52 ** 7.94

* Contents, in millions of cubic feet, at 2400 hours on last day of month by interpolation.
** Change in contents, equivalent in cubic feet per second.

04257000 BEAVER RIVER BELOW STILLWATER DAM, NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 mi^2 (445 km^2).

PERIOD OF RECORD.--May 1908 to current year. Published as "at State dam, near Beaver River" prior to June 1924.

REVISED RECORDS.--WSP 714: Drainage area. WRD NY 1973: 1971.

GAGE.--Nonrecording gage read once daily and after reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to June 1, 1924, nonrecording gage at present site and datum. June 1, 1924 to Nov. 14, 1929, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

REMARKS.--Records poor. Flow regulated by Stillwater Reservoir (see station 04256500). Discharge determined from ratings for gates and spillway of Stillwater Dam applied to log of reservoir elevation and gate operation.

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

AVERAGE DISCHARGE.--72 years, 378 ft^3/s (10.70 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,700 ft^3/s (105 m^3/s) May 3, 1926; practically no flow at times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 707 ft^3/s (20.0 m^3/s) Aug. 30, minimum daily, 32 ft^3/s (0.906 m^3/s) Mar. 20-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	421	591	312	424	403	489	34	150	208	308	504	703
2	420	400	367	535	403	490	34	206	208	514	371	701
3	420	305	605	596	402	484	34	207	208	386	305	603
4	410	305	605	595	401	482	34	207	209	43	438	398
5	418	495	605	593	400	479	35	207	110	43	504	398
6	163	590	603	597	399	477	36	207	40	44	504	391
7	116	589	602	589	397	474	36	207	40	355	503	398
8	420	588	407	588	396	472	36	207	41	510	502	397
9	420	504	311	587	395	469	36	207	43	508	501	396
10	420	303	506	585	393	467	36	207	45	506	501	548
11	420	304	603	583	391	465	36	207	160	480	500	624
12	173	493	602	584	390	463	36	207	168	209	499	622
13	36	588	602	583	389	460	37	207	47	209	498	621
14	278	587	602	583	388	458	38	207	48	406	498	619
15	423	586	602	583	387	455	38	207	49	503	497	618
16	424	586	601	583	387	453	38	207	165	502	496	617
17	424	374	600	582	386	450	38	208	223	501	495	616
18	425	302	600	581	472	449	38	208	223	501	495	615
19	384	490	599	468	514	171	38	208	223	193	494	614
20	36	583	598	411	512	32	37	208	223	39	493	613
21	36	583	597	411	510	32	38	208	223	316	493	482
22	217	394	480	410	507	32	188	208	223	319	492	415
23	308	301	601	410	506	32	264	208	223	95	492	545
24	497	301	600	410	503	32	264	208	320	40	491	609
25	597	301	600	409	501	32	264	208	260	40	490	607
26	596	491	599	408	498	32	265	208	258	40	529	605
27	595	236	598	407	496	32	265	208	256	40	613	576
28	594	51	597	407	493	32	265	208	256	351	611	557
29	594	220	480	406	491	33	116	208	255	506	656	556
30	594	310	425	406	---	34	38	208	254	505	707	475
31	593	---	424	405	---	34	---	208	---	505	705	---
TOTAL	11872	12751	16933	15719	12710	8996	2692	6374	5209	9517	15877	16539
MEAN	383	425	546	507	438	290	89.7	206	174	307	512	551
MAX	597	591	605	597	514	490	265	208	320	514	707	703
MIN	36	51	311	405	386	32	34	150	40	39	305	391

CAL YR 1979 TOTAL 172578 MEAN 473 MAX 1570 MIN 28
WTR YR 1980 TOTAL 135189 MEAN 369 MAX 707 MIN 32

04258000 BEAVER RIVER AT CROGHAN, NY

LOCATION.--Lat 43°53'50", long 75°24'16", Lewis County, Hydrologic Unit 04150101, on left bank 1,200 ft (366 m) upstream from Black Creek, and 0.5 mi (0.8 km) west of Croghan.

DRAINAGE AREA.--294 mi^2 (761 km^2).

PERIOD OF RECORD.--September 1930 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 806.20 ft (245.730 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Stillwater Reservoir (see station 04256500). Between Stillwater Dam and this station, flow is further regulated by several powerplant ponds. Diurnal fluctuation at low and medium flow.

AVERAGE DISCHARGE.--50 years, 592 ft^3/s (16.77 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,100 ft^3/s (144 m^3/s) May 21, 1969, gage height, 6.98 ft (2.128 m); minimum, 11 ft^3/s (0.31 m^3/s) Jan. 22, 29, Feb. 4, 1967, gage height, 0.63 ft (0.192 m); minimum daily, 22 ft^3/s (0.62 m^3/s) July 18, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft^3/s (66.0 m^3/s) Nov. 27, gage height, 4.93 ft (1.503 m); minimum, 34 ft^3/s (0.96 m^3/s) July 7, gage height, 0.96 ft (0.293 m); minimum daily, 49 ft^3/s (1.39 m^3/s) July 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	452	438	837	563	525	439	619	310	293	298	551	612
2	420	804	602	608	525	416	608	308	275	532	510	593
3	410	804	569	799	515	358	602	326	295	573	285	623
4	378	607	679	799	515	420	625	315	318	311	364	624
5	370	667	849	792	494	449	679	347	294	75	480	558
6	261	764	976	685	525	430	643	474	311	49	510	427
7	99	775	875	585	520	440	504	305	388	161	509	410
8	341	780	760	525	515	460	563	305	368	361	573	423
9	430	776	580	504	439	460	748	304	367	437	530	394
10	668	712	504	643	499	480	1580	300	339	433	287	464
11	590	575	569	837	494	449	1320	286	306	496	456	542
12	554	534	619	888	366	494	1010	288	287	301	508	541
13	524	525	1000	754	416	393	839	294	354	258	462	520
14	469	537	1070	608	393	504	733	404	295	389	600	617
15	482	533	969	722	362	479	743	370	275	515	829	633
16	551	696	805	760	366	531	795	280	270	511	693	674
17	449	795	754	849	397	484	713	272	278	573	605	613
18	650	685	792	837	379	741	700	274	283	500	625	840
19	588	615	744	805	515	602	635	317	261	519	550	780
20	462	673	792	649	649	643	540	342	267	293	624	771
21	572	689	786	547	531	875	562	321	270	351	681	764
22	694	723	792	541	371	935	345	285	268	725	677	768
23	461	546	710	454	402	722	338	263	267	962	657	587
24	613	534	585	536	366	608	337	258	286	988	644	733
25	531	414	735	558	360	735	344	254	301	844	401	711
26	592	912	902	585	510	915	372	268	284	680	425	690
27	495	1920	1160	531	444	843	357	399	273	336	480	696
28	502	1750	990	574	406	667	355	270	268	412	523	684
29	559	1150	875	494	464	685	532	255	267	447	404	677
30	691	942	849	504	---	703	437	265	268	515	510	499
31	600	---	580	479	---	597	---	306	---	540	515	---
TOTAL	15458	22875	24309	20015	13263	17957	19178	9565	8876	14385	16468	18468
MEAN	499	763	784	646	457	579	639	309	296	464	531	616
MAX	694	1920	1160	888	649	935	1580	474	388	988	829	840
MIN	99	414	504	454	360	358	337	254	261	49	285	394

CAL YR 1979 TOTAL 258510 MEAN 708 MAX 1990 MIN 99
WTR YR 1980 TOTAL 200817 MEAN 549 MAX 1920 MIN 49

04260500 BLACK RIVER AT WATERTOWN, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 43°59'08", long 75°55'30", Jefferson County, Hydrologic Unit 04150101, on downstream side of right abutment of Vanduzee Street Bridge at Watertown, and 3.5 mi (5.6 km) upstream from Philomel Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,876 mi² (4,859 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1920 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WDR NY-77-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 373.88 ft (113.959 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 3, 1921, nonrecording gage, and from Sept. 3, 1921 to Mar. 15, 1977, recording gage at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Stillwater Reservoir (see station 04256500), Fulton Chain of Lakes, and other reservoirs. Extensive diurnal fluctuation at low and medium flow caused by mills and powerplants in and above Watertown. During canal season, water is diverted out of basin through Forestport feeder and Black River Canal (flowing south), see station 04252000.

AVERAGE DISCHARGE.--60 years, 4,005 ft³/s (113.4 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s (1,120 m³/s) Mar. 16, 1977, gage height, 12.98 ft (3.956 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 2, 1934, gage height, 0.81 ft (0.247 m) present datum; minimum daily, 137 ft³/s (3.88 m³/s) Sept. 4, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, about 39,700 ft³/s (1,120 m³/s) Apr. 23, 1869 (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft³/s (480 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 24	2145	20,280	574	9.44	2.877	Apr. 11	1615	*22,410	635	*9.86	3.005

Minimum discharge, 92 ft³/s (2.60 m³/s) June 30, gage height, 1.19 ft (0.363 m); minimum daily, 970 ft³/s (27.5 m³/s), July 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1780	3600	10600	3820	2200	1570	10000	6440	1230	1200	2880	1270
2	1900	3400	8780	3520	2320	1510	10100	5770	2100	1270	2540	1890
3	1660	3800	7060	3140	2620	1480	9580	5020	2340	1480	2380	1800
4	1600	3900	5740	2730	2450	1440	9160	4290	4360	1540	1970	2890
5	1460	4100	5060	2880	2340	1300	9780	3710	4740	1310	2010	2960
6	1600	3800	4790	2770	2070	1460	10400	3330	4900	1050	2250	2390
7	3100	3650	5130	2320	1910	1420	10900	3160	4570	970	2460	1910
8	4660	3550	5470	2080	1860	1500	10700	2820	4060	1040	2680	1640
9	5130	3480	5170	2100	1830	1580	11100	2710	4380	1360	2530	1460
10	4950	4020	4360	2170	1650	1770	15900	2540	4590	1710	2130	1170
11	4510	5710	4040	2330	1620	1900	21000	2560	4280	1660	1740	1250
12	4080	5930	4820	4380	1570	2030	20600	2550	3700	1570	1850	1350
13	4000	5760	6290	5020	1480	1930	17400	2450	3040	1270	1670	1380
14	4880	5170	6290	4620	1420	1730	14400	2500	2740	989	1700	1480
15	4660	4660	6140	4680	1600	1750	12500	2600	2290	1180	1850	2060
16	4790	4190	5550	5080	1470	1660	11400	2620	2200	1320	1940	2210
17	4600	4130	4360	5220	1420	1770	10800	2290	2180	1370	1780	2130
18	4400	3880	3700	5330	1410	2850	10300	2240	2170	1710	1640	2040
19	4250	3740	3520	5110	1500	4380	9090	2600	1820	1810	1580	2390
20	3920	3650	3500	4600	1530	5080	7830	3260	1760	1610	1420	2530
21	3720	3440	3240	3980	1630	7120	6600	3120	2080	1450	1360	2360
22	3500	3350	3070	3300	1710	12700	5560	2700	2510	3720	1480	2000
23	3280	3550	3100	2800	1470	14300	4650	2330	2670	7810	1380	2030
24	2810	3400	3610	2700	1420	18000	4090	1820	2180	6810	1280	1770
25	3540	3550	5060	2670	1530	18200	3670	1820	1880	5750	1180	1900
26	3610	5150	7630	2420	1730	14700	3680	1720	1560	4240	1140	1910
27	3390	11700	8160	2410	1630	12400	4170	1810	1450	2910	1010	2030
28	3260	12200	8010	2110	1530	10700	4230	1640	1330	2690	1070	2100
29	3540	13000	7170	2540	1690	9650	4920	1360	1310	2890	1260	2130
30	4200	12500	6110	2230	---	9580	6670	1360	1070	3020	1140	1980
31	3800	---	4970	2390	---	9950	---	1280	---	3040	1190	---
TOTAL	110580	155960	170500	103450	50610	177410	291180	86420	81490	71749	54490	58410
MEAN	3567	5199	5500	3337	1745	5723	9706	2788	2716	2314	1758	1947
MAX	5130	13000	10600	5330	2620	18200	21000	6440	4900	7810	2880	2960
MIN	1460	3350	3070	2080	1410	1300	3670	1280	1070	970	1010	1170

CAL YR 1979 TOTAL 1813550 MEAN 4969 MAX 22600 MIN 1000
WTR YR 1980 TOTAL 1412249 MEAN 3859 MAX 21000 MIN 970

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-60, 1962 to current year.
CHEMICAL DATA: 1956 (e), 1959 (a), 1960 (b), 1965 (a), 1966-80 (d).
MINOR ELEMENTS DATA: 1970-71 (a), 1974-79 (b), 1980 (c).
PESTICIDE DATA: 1975-79 (b), 1980 (a).
ORGANIC DATA: OC--1973 (c), 1974 (a), 1975 (c), 1976-77 (b), 1978-80 (d).
PCB--1978-79 (b), 1980 (a).
NUTRIENT DATA: 1968 (b), 1969-80 (d).
BIOLOGICAL DATA:
Bacteria--1973-80 (d).
Phytoplankton--1975-77 (d), 1978-79 (c), 1980 (b).
Periphyton--1975-80 (b).
SEDIMENT DATA: 1975-76 (d), 1977 (c), 1978-80 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1955 to September 1959, July 1962 to March 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 11...	0745	4680	88	7.2	7.5	3.0	12.3	102	570	160	32
NOV 14...	0800	5260	82	7.1	4.0	2.0	13.5	102	630	110	34
DEC 11...	0945	4020	124	7.1	.0	2.0	14.6	101	250	37	54
JAN 22...	0900	3570	100	6.7	2.0	.90	14.5	107	190	35	41
FEB 20...	1030	1180	110	6.9	2.0	.60	14.0	102	140	K47	38
APR 22...	1100	5400	87	7.1	9.0	1.5	11.3	98	K37	K12	34
MAY 21...	0945	2450	106	7.0	16.5	.50	9.5	100	560	K15	38
JUN 19...	0830	2040	--	7.2	19.5	.40	8.9	101	200	K9	32
JUL 22...	0915	3680	107	7.0	25.0	1.6	8.0	99	870	560	35
AUG 20...	0830	1570	91	7.0	21.5	.90	8.0	92	1100	83	35
SEP 23...	0915	669	89	6.5	18.0	.50	9.1	100	1500	220	30

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 11...	3	11	1.2	2.5	.9	29	8.9	2.1	.1	5.6	63
NOV 14...	5	12	1.0	2.5	.7	29	9.9	1.9	.1	6.1	62
DEC 11...	17	19	1.6	3.2	.9	37	12	3.0	.1	6.3	82
JAN 22...	0	14	1.5	3.8	.9	41	14	2.9	.1	7.4	64
FEB 20...	6	13	1.3	5.2	.7	32	15	3.2	.1	8.3	71
APR 22...	11	12	.9	2.1	.8	23	7.7	2.0	.1	4.4	66
MAY 21...	11	13	1.4	4.7	.7	27	12	2.1	.1	5.0	64
JUN 19...	12	11	1.1	3.3	.7	20	12	2.1	.3	5.1	61
JUL 22...	6	12	1.2	5.0	.8	29	13	2.0	.1	5.5	66
AUG 20...	5	12	1.2	4.2	.7	30	12	2.2	.2	6.0	67
SEP 23...	8	10	1.1	3.8	.7	22	12	2.4	.2	6.2	60

K Results based on colony count outside the acceptable range (non-ideal colony count).

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT 11...	50	.16	.14	.00	.01	.32	.25	.32	.26	.48	.40
NOV 14...	53	.23	.34	.01	.06	1.1	1.3	1.1	1.4	1.3	1.7
DEC 11...	71	.20	.54	.01	.06	.30	.38	.31	.44	.51	.98
JAN 22...	72	.74	.65	.03	.06	1.2	.65	1.2	.71	1.9	1.4
FEB 20...	68	.38	.38	.10	.12	.33	.37	.43	.49	.81	.87
APR 22...	46	.50	.51	.02	.03	.38	.41	.40	.44	.90	.95
MAY 21...	57	.29	.31	.05	.08	.15	.12	.20	.20	.49	.51
JUN 19...	48	.35	.02	.10	.36	.14	.00	.24	.29	.59	.31
JUL 22...	58	.28	.30	.03	.02	.33	.31	.36	.33	.64	.63
AUG 20...	58	.29	.27	.07	.02	.43	.37	.50	.39	.79	.66
SEP 23...	51	.25	.29	.03	.03	.31	.18	.34	.21	.59	.50

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 11...	.030	.010	1	1	0	0	0	5	10	10	0
NOV 14...	.020	.010	--	--	--	--	--	--	--	--	--
DEC 11...	.020	.010	--	--	--	--	--	--	--	--	--
JAN 22...	.030	.010	1	0	<50	20	2	2	20	10	1
FEB 20...	.050	.030	--	--	--	--	--	--	--	--	--
APR 22...	.030	.010	--	--	--	--	--	--	--	--	--
MAY 21...	.030	.010	--	--	--	--	--	--	--	--	--
JUN 19...	.040	.030	1	1	<50	10	1	0	10	10	4
JUL 22...	.080	.010	--	--	--	--	--	--	--	--	--
AUG 20...	.070	.050	1	1	<50	0	1	1	30	20	0
SEP 23...	.020	.010	--	--	--	--	--	--	--	--	--

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 11...	0	5	3	520	160	2	0	30	20	.2	.1
NOV 14...	--	--	--	--	--	--	--	--	--	--	--
DEC 11...	--	--	--	--	--	--	--	--	--	--	--
JAN 22...	2	8	7	300	150	16	11	30	30	<.1	<.1
FEB 20...	--	--	--	--	--	--	--	--	--	--	--
APR 22...	--	--	--	--	--	--	--	--	--	--	--
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	0	5	3	410	190	20	4	50	20	<.1	.1
JUL 22...	--	--	--	--	--	--	--	--	--	--	--
AUG 20...	0	3	2	380	300	3	0	40	20	.2	<.1
SEP 23...	--	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT 11...	1	0	0	0	0	0	40	20	--	--	.4
NOV 14...	--	--	--	--	--	--	--	--	5.6	--	--
DEC 11...	--	--	--	--	--	--	--	--	5.2	--	--
JAN 22...	2	2	0	0	0	0	30	30	--	11	.5
FEB 20...	--	--	--	--	1	--	--	--	2.5	--	--
APR 22...	--	--	--	--	0	--	--	--	4.4	--	--
MAY 21...	--	--	--	--	0	--	--	--	4.0	--	--
JUN 19...	1	0	0	0	0	0	30	10	--	5.2	.6
JUL 22...	--	--	--	--	0	--	--	--	5.1	--	--
AUG 20...	3	0	0	0	0	0	10	20	--	--	.5
SEP 23...	--	--	--	--	--	--	--	--	8.2	--	--

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

PESTICIDE ANALYSES, NOVEMBER 1979 TO FEBRUARY 1980

DATE	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)
NOV 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 20...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 20...	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 11...	0745	4680	5	63
NOV 14...	0800	5260	5	71
DEC 11...	0945	4020	11	119
JAN 22...	0900	3570	3	29
FEB 20...	1030	1180	3	9.6
APR 22...	1100	5400	9	131
MAY 21...	0945	2450	4	26
JUN 19...	0830	2040	4	22
JUL 22...	0915	3680	11	109
AUG 20...	0830	1570	2	8.5
SEP 23...	0915	669	3	5.4

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSIS OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
Apr. 22 to May 21	29	0.394	0.394	2.40	1.50	Polyethylene strip
May 21 to June 19	29	1.34	.945	1.50	1.31	Polyethylene strip
May 19 to July 22	33	2.05	1.81	1.00	.000	Polyethylene strip
July 22 to Aug. 20	29	1.89	1.42	3.40	.880	Polyethylene strip

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	NOV 14,79	MAY 21,80	JUN 19,80	AUG 20,80	SEP 23,80
TIME	0800	0945	0830	0830	0915
TOTAL CELLS/ML	330	190	730	1000	64
DIVERSITY: DIVISION	1.2	1.7	1.3	1.3	1.4
.CLASS	1.2	1.7	1.3	1.3	1.4
..ORDER	2.0	1.9	1.6	1.4	1.9
...FAMILY	2.3	2.5	2.0	1.4	1.9
....GENUS	2.5	2.5	2.0	2.5	1.9

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	52	7	150#	15	--	-
....CHODATELLA	--	-	--	-	13	2	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	240#	24	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	140	14	--	-
....OOCYSTIS	--	-	--	-	--	-	13	1	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	13#	20
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	26	13	210#	28	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	13	7	26	4	--	-	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....ARTHRODESMUS	14	4	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	29	9	--	-	26	4	51	5	13#	20
....MELOSIRA	29	9	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	14	4	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	26	3	--	-
...CYMBELLACEAE										
....CYMBELLA	14	4	64#	33	13	2	--	-	--	-
...FRAGILARIACEAE										
....SYNEDRA	--	-	--	-	13	2	--	-	--	-
...NAVICULACEAE										
....NAVICULA	--	-	13	7	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	--	-	13	7	13	2	--	-	26#	40
...TABELLARIACEAE										
....TABELLARIA	29	9	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	310#	30	--	-
....ANACYSTIS	140#	43	51#	27	370#	51	77	8	13#	20
..HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	57#	17	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	13	7	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04253300 SIXTH LAKE.--Lat 43°44'43", long 74°46'58", Hamilton County, Hydrologic Unit 04150101, on dam at outlet of Sixth Lake at Inlet, and 11.2 mi (18.0 km) upstream from dam at Old Forge. DRAINAGE AREA, 18.6 mi^2 (48.2 km^2). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Hudson River-Black River Regulating District).

The Sixth and Seventh Lakes of Fulton Chain Lakes are partially formed and controlled by the concrete dam at Inlet, while the Eighth Lake is upstream and at approximately 5 feet (1.5 m) higher elevation. Storage began around 1881. The present structure is a concrete dam with control gates which were installed in 1938. Usable capacity 296.6 mil ft^3 (8.400 hm^3) between minimum operating level, elevation 1,755.1 ft (541.05 m) and crest of spillway, elevation 1,786.0 ft (544.37 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 332 mil ft^3 (9.4 hm^3) Oct. 3, 1945, elevation, 1,787.1 ft (544.71 m); minimum observed, less than 900,000 ft^3 (25,500 m^3) Nov. 18, 1943, water level below elevation 1,775.6 ft (541.20 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 303.0 mil ft^3 (8.6 hm^3) June 4, elevation, 1786.20 ft (544.43 m); minimum observed, 208.4 mil ft^3 (5.90 hm^3) Mar. 14, 15, 17, elevation, 1,783.2 ft (543.52 m).

04253400 FIRST LAKE (formerly published as "Old Forge Reservoir").--Lat 43°42'44", long 74°58'12", Herkimer County, Hydrologic Unit 04150101, at dam on Middle Branch Moose River, and 100 ft (30 m) downstream from bridge on State Highway 28 at Old Forge, 11.2 mi (18.0 km) downstream from dam on Sixth Lake outlet at Inlet. DRAINAGE AREA, 52.1 mi^2 (135 km^2). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily about 0800. Datum of gage is 1,700.15 ft (518.206 m) National Geodetic Vertical Datum of 1929 (levels by Board of Hudson River-Black River Regulating District).

The First through Fifth Lakes of Fulton Chain Lakes are partially formed and controlled by a concrete dam with 12-inch flashboards. Storage began around 1881 or 1882 with a wooden crib dam. This dam was replaced with a concrete dam in 1905 and gates were installed in 1927. Usable capacity with flashboards, 895.6 mil ft^3 (25.36 hm^3), gage height, 6.89 ft (2.100 m). Usable capacity without flashboards, 764.3 mil ft^3 (21.64 hm^3), gage height, 5.91 ft (1.801 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,019 mil ft^3 (28.85 hm^3) June 17, 1972, gage height, 7.78 ft (2.371 m); minimum observed, 6,500,000 ft^3 (184,000 m^3) Nov. 3, 1939, gage height, -0.35 ft (-0.107 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 935.2 mil ft^3 (26.49 hm^3) June 4, gage height, 7.18 ft (2.188 m); minimum observed, 544.6 mil ft^3 (15.42 hm^3) Jan. 30, 31, Feb. 1-4, gage height, 4.22 ft (1.286 m).

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY (see station for daily elevation, skeleton capacity table, monthly contents, and change in contents).

MONTHEND ELEVATION, GAGE HEIGHT, AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	*Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	*Gage height (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	04253300 Sixth Lake			04253400 First Lake		
Sept. 30	1,785.33	275.2		6.49	841.6	
Oct. 31	1,784.77	257.4	- 6.65	6.76	877.8	+ 13.5
Nov. 30	1,784.48	248.2	- 3.55	6.45	836.0	- 16.1
Dec. 31	1,783.57	219.9	-10.6	5.20	672.0	- 61.2
CAL YR 1979			+ 2.12			+ 1.36
Jan. 31	1,783.60	220.8	+ 0.34	4.22	544.6	- 47.6
Feb. 29	1,783.30	211.5	- 3.71	4.36	562.8	+ 7.26
Mar. 31	1,785.43	278.4	+25.0	5.39	696.7	+ 50.0
Apr. 30	1,785.43	278.4	0.0	5.99	774.7	+ 30.1
May 31	1,785.28	273.6	- 1.79	6.91	898.3	+ 46.1
June 30	1,785.50	280.6	+ 2.70	6.99	908.7	+ 4.01
July 31	1,785.90	293.4	+ 4.78	7.03	914.2	+ 2.05
Aug. 31	1,785.42	278.0	+ 5.75	6.62	858.8	- 20.7
Sept. 30	1,784.23	240.4	-14.5	5.84	755.2	- 40.0
WTR YR 1980			- 1.10			- 2.73

* Elevations or gage heights at 2400 hours, by interpolation.

04261000 OSWEGATCHIE RIVER AT CRANBERRY LAKE, NY

LOCATION.--Lat 44°13'15", long 74°51'00", St. Lawrence County, Hydrologic Unit 04150302, on right bank 900 ft (274 m) downstream from dam at outlet of Cranberry Lake, at village of Cranberry Lake.

DRAINAGE AREA.--140 mi^2 (363 km^2), revised.

PERIOD OF RECORD.--May 1923 to current year. Prior to October 1958, published as "East Branch Oswegatchie River at Cranberry Lake."

GAGE.--Water-stage recorder. Datum of gage is 1,458.23 ft (444.468 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, nonrecording gage at site 80 ft (24 m) upstream at same datum.

REMARKS.--Records good. Since 1867, flow regulated by Cranberry Lake.

AVERAGE DISCHARGE.--57 years, 292 ft^3/s (8.269 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft^3/s (54.9 m^3/s) May 13, 1943, gage height, 7.70 ft (2.347 m); minimum daily, 3 ft^3/s (0.085 m^3/s) Apr. 9-16, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 938 ft^3/s (26.6 m^3/s) Apr. 16; minimum daily, 120 ft^3/s (3.40 m^3/s) Mar. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	252	644	592	177	148	128	206	145	142	142	143
2	261	271	640	589	177	148	129	206	145	144	143	146
3	245	271	635	588	177	148	130	206	145	144	144	156
4	245	267	635	585	177	148	130	206	145	142	144	156
5	341	274	631	582	177	147	131	206	145	142	144	156
6	709	297	630	578	176	147	131	206	145	142	144	156
7	798	297	628	497	175	147	132	205	145	141	144	156
8	605	297	627	353	175	147	132	203	147	140	145	156
9	294	297	624	353	175	147	138	203	147	140	145	156
10	258	297	622	350	163	147	151	203	147	141	145	156
11	242	297	620	348	153	147	152	203	147	141	145	156
12	242	297	617	349	152	147	194	203	147	141	146	156
13	242	297	616	349	151	147	229	203	147	140	146	156
14	242	297	572	349	151	139	316	203	148	140	147	156
15	242	297	475	371	151	125	738	201	148	138	145	156
16	242	315	475	419	151	124	938	194	148	138	145	156
17	242	365	475	420	151	124	899	168	148	138	145	156
18	242	361	475	420	151	125	747	161	150	138	145	156
19	242	361	475	419	151	124	742	161	150	138	145	156
20	242	357	473	417	150	124	734	161	151	138	145	156
21	245	357	469	415	150	125	683	161	151	138	145	156
22	245	357	463	415	150	126	527	160	151	138	145	157
23	245	357	461	414	150	125	424	159	153	140	145	157
24	245	357	459	411	150	120	389	159	153	140	145	157
25	245	357	460	411	149	121	308	159	151	140	145	157
26	245	361	464	390	149	123	308	159	153	141	143	158
27	245	369	509	340	148	123	308	159	147	141	143	157
28	242	369	600	273	148	124	308	159	142	141	143	158
29	242	447	598	177	148	125	305	156	142	142	142	158
30	242	583	596	177	---	126	273	145	142	142	143	157
31	242	---	594	177	---	127	---	145	---	142	142	---
TOTAL	9126	9978	17262	12528	4603	4165	10854	5629	4425	4353	4475	4669
MEAN	294	333	557	404	159	134	362	182	148	140	144	156
MAX	798	583	644	592	177	148	938	206	153	144	147	158
MIN	242	252	459	177	148	120	128	145	142	138	142	143

CAL YR 1979 TOTAL 132571 MEAN 363 MAX 973 MIN 109
WTR YR 1980 TOTAL 92067 MEAN 252 MAX 938 MIN 120

04262500 WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, NY

LOCATION.--Lat 44°11'08", long 75°19'52", Lewis County, Hydrologic Unit 04150302, on right bank just downstream from highway bridge, 0.5 mi (0.8 km) northeast of Geers Corners, 1.5 mi (2.4 km) downstream from Big Creek, and 4.0 mi (6.4 km) downstream from Harrisville.

DRAINAGE AREA.--258 mi^2 (668 km^2).

PERIOD OF RECORD.--July 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934.

GAGE.--Water-stage recorder. Datum of gage is 738.51 ft (225.098 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 30, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except for winter periods, which are fair.

AVERAGE DISCHARGE.--64 years, 511 ft^3/s (14.47 m^3/s), 26.90 in/yr (683 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,080 ft^3/s (200 m^3/s) Mar. 15, 1977, gage height, 9.31 ft (2.838 m); maximum gage height, 9.6 ft (2.93 m) Jan. 9, 1930; minimum discharge, 25 ft^3/s (0.71 m^3/s) Sept. 1, 1934, gage height, 0.86 ft (0.262 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,300 ft^3/s (93 m^3/s):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Nov. 28	0200	3,730	106	6.54	1.993

Minimum discharge, 77 ft^3/s (2.18 m^3/s) Aug. 30, gage height, 1.47 ft (0.448 m); minimum daily, 82 ft^3/s (2.32 m^3/s) Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	465	1290	525	160	126	1440	742	139	187	200	153
2	134	430	1000	454	160	121	1300	668	149	230	178	298
3	129	451	812	387	150	116	1150	598	185	207	185	587
4	134	465	691	317	150	112	1010	525	218	168	204	674
5	120	438	602	271	150	112	1170	463	269	144	211	494
6	144	401	579	239	143	123	1550	421	262	128	282	351
7	284	373	651	218	138	132	1510	412	255	124	276	284
8	381	361	780	218	135	132	1270	408	300	120	246	217
9	438	361	803	223	130	133	1220	388	324	128	192	172
10	554	413	712	223	120	136	1970	372	338	132	150	156
11	592	576	647	245	120	156	3130	357	329	125	130	146
12	527	621	695	500	120	161	2490	344	296	120	131	128
13	511	543	856	676	120	150	2020	328	269	113	261	118
14	639	506	926	715	120	145	1920	322	224	106	380	156
15	707	501	841	672	120	142	1680	326	190	97	343	371
16	669	474	727	603	130	139	1470	315	196	102	314	461
17	657	434	585	531	130	147	1350	292	189	114	262	388
18	657	434	532	496	130	306	1160	291	164	128	216	379
19	615	443	450	482	130	380	970	345	145	138	186	414
20	565	438	400	442	132	494	837	393	138	125	161	374
21	592	409	368	376	138	698	729	386	146	133	137	333
22	581	397	352	334	140	1350	644	339	143	232	125	328
23	527	465	364	312	144	2080	568	302	144	600	114	320
24	501	543	436	250	145	1910	516	270	135	776	103	308
25	523	587	689	230	143	1710	479	239	122	689	95	281
26	511	779	1180	220	139	1610	535	208	111	477	89	264
27	465	2390	1470	210	136	1400	597	184	103	371	89	457
28	425	3440	1320	200	133	1200	569	170	95	295	88	558
29	434	2450	1020	190	129	1140	681	153	93	239	87	468
30	506	1760	805	180	---	1270	767	145	97	248	82	377
31	511	---	656	170	---	1440	---	145	---	238	85	---
TOTAL	14168	22348	23239	11109	3935	19271	36702	10851	5768	7034	5602	10015
MEAN	457	745	750	358	136	622	1223	350	192	227	181	334
MAX	707	3440	1470	715	160	2080	3130	742	338	776	380	674
MIN	120	361	352	170	120	112	479	145	93	97	82	118
CFSM	1.77	2.89	2.91	1.39	.53	2.41	4.74	1.36	.74	.88	.70	1.30
IN.	2.04	3.22	3.35	1.60	.57	2.78	5.29	1.56	.83	1.01	.81	1.44

CAL YR 1979 TOTAL 236029 MEAN 647 MAX 4440 MIN 54 CFSM 2.51 IN 34.03
WTR YR 1980 TOTAL 170042 MEAN 465 MAX 3440 MIN 82 CFSM 1.80 IN 24.52

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°35'58", long 75°22'45", St. Lawrence County, Hydrologic Unit 04150302, on right bank 1.5 mi (2.4 km) downstream from Beaver Creek, and 2.5 mi (4.0 km) upstream from Heuvelton. Water-quality sampling site at discharge station except for the collection of once daily specific conductance and water temperature data which is collected at powerhouse 2.6 mi (4.2 km) downstream lat 44°37'02", long 75°24'18".

DRAINAGE AREA.--973 mi^2 (2,520 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 288.85 ft (88.041 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Since 1867, seasonal flow regulated by Cranberry Lake; slight diurnal fluctuation at low flow and medium flow caused by powerplants. During high stages on Grass River, part of flow of that stream may pass through Upper Lake, Indian Creek and Lower Lake and enter Oswegatchie River at Rensselaer Falls, 4.5 mi (7.2 km) above station. In October 1973, a dike was installed on Indian Creek to prevent overflow of Grass River during high flows.

AVERAGE DISCHARGE.--64 years, 1,712 ft^3/s (48.48 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft^3/s (555 m^3/s) Apr. 6, 1960, gage height, 10.36 ft (3.158 m); minimum recorded, 130 ft^3/s (3.68 m^3/s) Aug. 17, 1949, gage height, 0.47 ft (0.143 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,790 ft^3/s (192 m^3/s) Nov. 29, gage height, 5.55 ft (1.692 m); minimum, 276 ft^3/s (7.82 m^3/s) June 27 and 28, gage height, 0.85 ft (0.259 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	702	1200	5640	2720	700	449	3900	3370	470	415	763	392
2	639	1290	4450	2000	660	401	3680	2860	631	459	796	642
3	686	1320	3530	1600	620	433	3310	2420	504	752	759	1190
4	664	1390	2940	1500	580	476	2850	1970	461	744	786	1470
5	654	1530	2570	1400	560	496	3010	1700	545	613	707	1620
6	701	1440	2550	1300	540	630	3510	1520	627	477	713	1550
7	668	1100	2770	1200	520	572	3720	1440	748	470	731	1320
8	799	956	2840	1200	520	533	3620	1500	767	366	827	1030
9	1010	965	3200	1200	500	461	3960	1430	780	360	807	814
10	1670	1380	2890	1190	506	477	5400	1160	799	365	738	800
11	1680	1860	2770	1210	499	683	6190	1160	772	476	571	748
12	1650	1880	2660	2190	499	1110	6520	1040	763	538	523	677
13	1590	1870	2780	2660	529	964	6600	979	776	528	611	589
14	1540	1990	2860	2680	521	806	6170	1170	799	575	604	541
15	1490	1990	3010	2510	527	756	5640	1160	744	478	1070	777
16	1690	1920	2990	2270	539	654	5160	1160	583	384	1460	973
17	1760	1690	2450	2170	522	727	4490	1090	477	389	1330	1100
18	1570	1590	2140	2020	535	2870	4030	1120	387	459	1010	991
19	1600	1630	1800	1800	554	3890	3790	1040	478	581	775	1040
20	1650	1720	1500	1630	542	3260	3370	1300	534	467	654	1150
21	1680	1630	1400	1400	538	4080	3030	1180	589	484	543	925
22	1780	1620	1400	1300	586	5130	2760	1150	637	457	590	976
23	1740	1820	1400	1200	611	5570	2290	1050	575	620	534	1010
24	1600	1940	1920	1100	591	5630	2230	1010	432	961	510	1040
25	1470	1990	2880	1000	595	5760	2060	827	369	1400	486	1080
26	1550	2270	4970	1000	561	5820	1740	724	393	1420	408	1090
27	1520	4430	5520	940	534	5780	1980	710	332	1260	337	878
28	1570	6100	5050	900	456	5160	2030	776	363	1030	442	851
29	1390	6710	4530	840	466	4510	2920	607	452	799	364	1120
30	1440	6480	3930	820	---	3710	3490	588	336	893	327	1200
31	1390	---	3320	760	---	3790	---	589	---	847	385	---
TOTAL	41543	65701	94660	47710	15911	75588	113450	39800	17123	20067	21161	29584
MEAN	1340	2190	3054	1539	549	2438	3782	1284	571	647	683	986
MAX	1780	6710	5640	2720	700	5820	6600	3370	799	1420	1460	1620
MIN	639	956	1400	760	456	401	1740	588	332	360	327	392

CAL YR 1979 TOTAL 773044 MEAN 2118 MAX 9440 MIN 194
WTR YR 1980 TOTAL 582298 MEAN 1591 MAX 6710 MIN 327

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1966-69, 1971-72, 1978 to current year.
CHEMICAL DATA: 1960 (a), 1966 (b), 1968-69 (d), 1971-72 (a), 1978 (c), 1979-80 (d).
MINOR ELEMENTS DATA: 1978-79 (b), 1980 (c).
ORGANIC DATA: OC--1978 (c), 1979-80 (d).
NUTRIENT DATA: 1978 (c), 1979-80 (d).
BIOLOGICAL DATA:
Bacteria--1978 (c), 1979-80 (d).
Phytoplankton--1978-80 (c).
Periphyton--1978-80 (b).
SEDIMENT DATA: 1978 (c), 1979-80 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1978 to current year.
WATER TEMPERATURES: January 1978 to current year.

REMARKS.--Specific conductance values were not reported for February because the dates collected were mixed up. Range in values was 22 to 120 micromhos.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 152 micromhos Mar. 5, 1978; minimum daily, 22 micromhos sometime in February 1980.
WATER TEMPERATURES: Maximum daily, 28.0°C July 28, 1978 and July 23-28, 1979; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 148 micromhos Mar. 16; minimum daily, 22 micromhos sometime in February.
WATER TEMPERATURES: Maximum daily, 26.0°C July 21-23, Aug. 6-13; minimum daily, freezing point Dec. 19-21.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1130	680	100	7.1	15.0	2.0	8.6	89	25	K15	42
NOV 07...	1100	1090	94	6.8	6.0	1.0	12.0	96	110	21	39
DEC 06...	0930	2630	95	6.7	.5	1.0	14.2	99	270	49	39
JAN 03...	1100	1520	100	6.5	.0	2.0	13.8	94	280	55	42
FEB 11...	1300	529	124	6.6	.0	1.0	13.6	94	K20	K6	49
MAR 10...	1100	488	140	6.3	2.0	.40	10.6	77	230	58	54
APR 07...	1400	3710	94	7.2	7.5	.50	11.6	97	42	K11	39
MAY 05...	1130	1650	110	6.4	13.5	1.1	8.8	87	72	K10	47
JUN 03...	1100	500	112	6.9	19.5	.20	8.1	90	K13	K12	45
JUL 07...	1200	500	116	8.0	23.5	.80	8.8	106	K16	K3	42
AUG 06...	1200	725	134	6.7	25.0	2.0	6.5	80	35	K5	60
SEP 10...	1100	865	124	5.7	21.5	.50	6.6	76	28	--	40

K Results based on colony count outside the acceptable range (non-ideal colony count).

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
03...	15	12	3.0	3.1	.7	27	14	2.4	.2	5.7	67
NOV											
07...	0	11	2.8	2.5	.7	39	11	2.8	.2	6.1	72
DEC											
06...	7	11	2.9	1.9	.8	32	12	2.3	.1	5.9	76
JAN											
03...	7	12	3.0	2.0	.7	35	14	1.8	.1	6.1	69
FEB											
11...	17	14	3.4	3.3	.8	32	16	2.9	.2	8.1	70
MAR											
10...	23	15	3.9	4.9	1.2	31	19	4.8	.2	8.5	93
APR											
07...	13	11	2.7	2.3	.9	26	11	2.7	.1	4.5	58
MAY											
05...	12	13	3.5	2.6	.9	35	8.7	2.4	.2	3.4	80
JUN											
03...	10	13	3.1	2.8	.6	35	13	2.5	.2	2.7	65
JUL											
07...	13	12	2.9	4.2	.7	29	17	3.1	.2	3.3	61
AUG											
06...	18	17	4.3	3.5	.9	42	16	3.1	.2	5.7	83
SEP											
10...	13	12	2.5	3.0	.7	27	12	2.2	.2	6.9	83

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT											
03...	58	.21	.20	.03	.02	.51	.42	.54	.44	.75	.64
NOV											
07...	61	.13	.18	.03	.05	.56	.44	.59	.49	.72	.67
DEC											
06...	57	.12	.20	.07	.01	.33	.40	.40	.41	.52	.61
JAN											
03...	62	.22	.25	.06	.06	.51	.40	.57	.46	.79	.71
FEB											
11...	69	.10	.25	.08	.09	.15	.26	.23	.35	.33	.60
MAR											
10...	79	.18	.57	.10	.13	.25	.25	.35	.38	.53	.95
APR											
07...	53	.33	.34	.03	.05	.65	.34	.68	.39	1.0	.73
MAY											
05...	57	.17	.22	.02	.13	.38	.25	.40	.38	.57	.60
JUN											
03...	60	.14	.14	.03	.05	.43	.22	.46	.27	.60	.41
JUL											
07...	62	.20	.20	.02	.02	.38	.22	.40	.24	.60	.44
AUG											
06...	77	.18	.18	.04	.03	.29	.18	.33	.21	.51	.39
SEP											
10...	57	.21	.22	.02	.08	.32	.32	.34	.40	.55	.62

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT 03...	.020	.010	--	--	--	--	--	--	--	--	--
NOV 07...	.010	.010	0	0	0	20	0	2	10	10	0
DEC 06...	.030	.020	--	--	--	--	--	--	--	--	--
JAN 03...	.040	.010	--	--	--	--	--	--	--	--	--
FEB 11...	.020	.010	1	0	100	30	2	1	10	10	0
MAR 10...	.020	.030	--	--	--	--	--	--	--	--	--
APR 07...	.020	.010	1	1	50	20	1	5	10	10	0
MAY 05...	.020	.010	--	--	--	--	--	--	--	--	--
JUN 03...	.020	.010	--	--	--	--	--	--	--	--	--
JUL 07...	.010	.010	--	--	--	--	--	--	--	--	--
AUG 06...	.060	.030	1	1	<50	100	0	0	20	10	0
SEP 10...	.000	.000	--	--	--	--	--	--	--	--	--

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 03...	--	--	--	--	--	--	--	--	--	--	--
NOV 07...	2	2	3	460	250	5	2	30	20	<.1	<.1
DEC 06...	--	--	--	--	--	--	--	--	--	--	--
JAN 03...	--	--	--	--	--	--	--	--	--	--	--
FEB 11...	2	2	3	390	290	9	5	30	30	<.1	<.1
MAR 10...	--	--	--	--	--	--	--	--	--	--	--
APR 07...	2	7	6	350	130	13	4	40	20	.1	.1
MAY 05...	--	--	--	--	--	--	--	--	--	--	--
JUN 03...	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	--	--	--	--	--	--	--	--	--	--	--
AUG 06...	0	1	2	550	290	3	0	60	40	.2	<.1
SEP 10...	--	--	--	--	--	--	--	--	--	--	--

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT											
03...	--	--	--	--	--	--	--	--	6.6	--	--
NOV											
07...	0	2	0	0	0	0	250	20	--	--	2.9
DEC											
06...	--	--	--	--	0	--	--	--	7.9	--	--
JAN											
03...	--	--	--	--	--	--	--	--	6.6	--	--
FEB											
11...	2	1	0	0	0	0	30	30	--	13	.4
MAR											
10...	--	--	--	--	0	--	--	--	4.7	--	--
APR											
07...	2	0	0	0	0	0	50	10	--	--	.2
MAY											
05...	--	--	--	--	0	--	--	--	13	--	--
JUN											
03...	--	--	--	--	--	--	--	--	4.7	--	--
JUL											
07...	--	--	--	--	0	--	--	--	3.0	--	--
AUG											
06...	1	0	0	0	0	0	20	10	--	8.0	.3
SEP											
10...	--	--	--	--	0	--	--	--	8.7	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
03...	1130	680	3	5.5
NOV				
07...	1100	1090	2	5.9
DEC				
06...	0930	2630	4	28
APR				
07...	1400	3710	8	80
MAY				
05...	1130	1650	2	8.9
JUN				
03...	1100	500	1	1.3
JUL				
07...	1200	500	0	.00
AUG				
06...	1200	725	4	7.8
SEP				
10...	1100	865	2	4.7

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
May 5 to June 3	29	10.8	9.37	.740	.100	Polyethylene strip
June 3 to July 7	34	.472	.394	.320	.050	Polyethylene strip
July 7 to Aug 6	30	6.06	4.33	6.91	.510	Polyethylene
Aug. 6 to Sept. 10	35	3.07	1.97	3.37	1.31	Polyethylene strip

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR, OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	NOV 7,79	APR 7,80	MAY 5,80	JUN 3,80
TIME	1300	1400	1130	1100
TOTAL CELLS/ML	52	400	3400	320
DIVERSITY: DIVISION	0.0	1.4	1.2	0.5
.CLASS	0.0	1.4	1.3	0.5
..ORDER	0.0	1.8	1.3	0.5
...FAMILY	0.0	1.9	1.5	0.5
....GENUS	0.0	1.9	1.6	0.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	26	6	82	2	14	5
....DICTYOSPHAERIUM	--	-	--	-	410	12	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	52#	100	--	-	82	2	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	39	10	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	51	13	55	2	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	--	-	--	-	41	1	--	-
...NAVICULACEAE								
....NAVICULA	--	-	26	6	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	26	6	82	2	14	5
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...SYNURACEAE								
....SYNURA	--	-	--	-	27	1	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	110	3	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	27	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	2500#	73	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	230#	58	--	-	290#	91
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....PHACUS	--	-	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1980 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUL 7,80	AUG 6,80	SEP 10,80
TIME	1200	1200	1100
TOTAL CELLS/ML	330	810	39
DIVERSITY: DIVISION	1.5	0.9	0.9
.CLASS	1.5	0.9	0.9
..ORDER	1.9	1.7	0.9
...FAMILY	2.3	1.9	0.9
....GENUS	2.3	2.0	0.9

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	--	-	13	2	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	26	3	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-
....SELENASTRUM	26	8	--	-	--	-
....TETRAEDRON	--	-	13	2	--	-
...SCENEDESMACEAE						
....SCENEDESMUS	51#	15	180#	22	26#	67
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	13	2	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	77#	23	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	13	4	--	-	13#	33
...CYMBELLACEAE						
....CYMBELLA	13	4	--	-	--	-
...FRAGILARIACEAE						
....SYNEDRA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	13	4	--	-	--	-
.CHRYSOPHYCEAE						
..CHRYSOMONADALES						
...SYNURACEAE						
....SYNURA	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	--	-	--	-
...CRYPTOMONADACEAE						
....CRYPTOMONAS	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	140#	42	340#	41	--	-
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	230#	29	--	-
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....PHACUS	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	102	84	108		130	85	122	106	105	102	108
2	99	102	84	86		130	80	110	106	104	99	112
3	99	102	88	75		130	76	110	108	106	100	128
4	98	104	90	94		128	94	110	112	112	100	128
5	102	100	92	96		128	90	110	112	112	126	136
6	102	93	93	87		126	91	111	110	108	126	138
7	106	98	94	102		138	92	110	110	108	126	108
8	106	100	106	92		132	92	111	112	110	120	110
9	120	114	104	73		138	81	111	112	114	106	95
10	121	114	104	56		142	81	108	112	112	106	95
11	120	112	99	80		142	96	110	112	114	108	94
12	122	112	99	90		140	76	110	112	112	108	94
13	112	114	100	78		140	76	110	110	114	108	94
14	112	114	97	80		140	85	110	108	114	108	105
15	95	116	96	76		140	89	112	108	114	112	105
16	95	112	84	57		148	86	108	108	118	112	106
17	96	110	85	88		146	90	106	100	118	112	107
18	96	112	86	72		144	89	106	100	118	134	122
19	98	114	82	75		110	86	106	100	112	134	120
20	95	116	87	60		120	85	106	99	111	135	113
21	96	118	89	64		109	90	110	100	108	122	114
22	102	112	91	67		98	91	108	97	87	120	114
23	102	111	91	77		95	---	117	97	100	122	109
24	106	116	108	85		87	91	122	97	110	114	109
25	112	116	109	95		77	88	122	99	112	114	108
26	114	120	112	73		78	95	122	100	125	114	105
27	108	126	114	95		78	99	114	102	100	112	104
28	110	108	105	62		84	100	112	100	100	114	106
29	110	86	95	77		78	122	110	104	100	110	106
30	108	81	95	85		82	122	108	104	87	112	102
31	108	---	96	82		86	---	---	---	87	112	---
MEAN	106	109	95	80		118	90	111	105	108	114	110

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	11.0	8.0	2.0	1.0	1.0	6.0	13.0	20.0	23.0	25.0	25.0
2	16.5	12.0	6.0	2.0	1.0	1.0	5.5	14.0	20.0	23.0	25.0	25.0
3	17.0	9.0	4.0	2.0	1.0	1.0	6.0	14.5	20.0	23.0	25.0	24.5
4	17.0	8.0	3.0	2.0	1.0	2.0	6.0	15.0	20.0	23.0	25.0	24.0
5	16.5	10.0	3.0	2.0	1.0	2.0	6.5	15.0	20.0	23.0	25.5	24.0
6	16.0	10.5	3.0	2.0	1.0	2.0	7.0	15.0	20.0	24.0	26.0	24.0
7	15.0	11.0	3.0	2.0	1.0	2.0	8.0	14.5	20.0	24.0	26.0	24.0
8	14.0	11.0	3.0	2.0	1.0	2.0	8.5	14.0	20.0	24.0	26.0	23.0
9	13.0	10.5	2.0	2.0	1.5	2.0	9.0	14.0	20.0	24.0	26.0	21.5
10	12.0	10.0	2.0	2.0	1.5	2.0	9.0	14.0	20.0	24.0	26.0	21.0
11	11.5	9.5	3.0	2.0	2.0	2.0	9.0	14.0	20.0	24.0	26.0	20.0
12	11.0	9.0	4.0	2.0	2.0	2.0	9.0	14.0	20.0	24.0	26.0	19.0
13	10.0	10.0	3.0	2.0	1.5	2.0	9.0	15.0	20.0	24.0	26.0	19.0
14	9.5	7.0	3.0	2.0	1.0	2.0	8.5	14.0	20.0	24.0	25.5	18.5
15	9.0	6.5	3.0	2.0	1.0	2.0	8.0	14.5	20.0	25.0	25.0	18.0
16	9.0	6.0	3.0	2.0	1.0	2.0	7.0	15.0	20.0	25.0	24.0	18.0
17	8.5	6.0	2.0	2.0	1.0	2.0	7.0	15.0	20.0	25.0	23.5	18.0
18	8.0	6.0	1.0	2.0	1.0	2.0	8.0	16.0	20.0	25.0	23.0	17.5
19	8.0	6.0	.0	2.0	1.5	2.0	---	16.0	20.0	25.0	23.0	17.0
20	8.0	6.0	.0	2.0	1.5	2.0	9.0	17.0	20.0	25.0	23.0	18.0
21	8.5	6.0	.0	2.0	2.0	2.0	10.0	17.0	20.0	26.0	23.0	18.0
22	10.0	8.0	4.0	2.0	2.0	2.0	10.0	18.0	20.0	26.0	24.0	18.0
23	12.0	10.0	4.0	2.0	2.0	2.0	10.0	20.0	20.0	26.0	24.0	17.5
24	13.0	9.5	2.0	1.0	2.0	2.0	10.0	20.0	20.0	25.0	24.0	17.0
25	12.0	9.0	2.0	1.0	1.5	2.0	10.5	21.0	25.0	25.0	24.0	17.0
26	11.0	10.0	2.0	1.0	1.0	2.0	11.0	21.0	25.0	25.0	24.0	16.0
27	10.0	10.0	2.0	1.0	1.0	2.0	11.0	21.0	25.0	25.0	24.0	15.0
28	9.5	10.0	2.0	2.0	1.0	2.0	12.0	21.0	25.0	25.0	24.0	14.5
29	9.0	8.0	2.0	2.0	1.0	2.0	---	22.0	25.0	25.0	24.0	14.0
30	9.0	7.0	2.0	2.0	---	3.0	12.0	22.0	25.0	25.0	24.0	15.0
31	10.0	---	2.0	1.0	---	4.0	---	---	---	25.0	24.0	---
MEAN	11.5	9.0	2.5	2.0	1.5	2.0	8.5	16.5	21.0	24.5	24.5	19.5

04264050 ST. LAWRENCE RIVER NEAR WADDINGTON, NY

LOCATION.--Lat 44°51'27", long 75°14'46", St. Lawrence County, Hydrologic Unit 04150301, on right bank at Leishman Point, 2.1 mi (3.4 km) west of Waddington, 2.5 mi (4.0 km) upstream from Sucker Brook, and 3.3 mi (5.3 km) downstream from Iroquois Dam.

DRAINAGE AREA.--298,500 mi^2 (773,100 km^2).

PERIOD OF RECORD.--January 1976 to November 1976, November 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is International Great Lakes Datum.

REMARKS.--Flow regulated by international agreement administered by International St. Lawrence River Board of control under the International Joint Commission. Records do not include water diverted from Lake Michigan by Chicago Sanitary and Ship Canal, operation of which began in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, operation of which began in July 1939, and by the Ogoki Project, operation of which began in July 1943.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 244.80 ft (74.615 m) Apr. 6, 1976; minimum daily, 236.30 ft (72.024 m) Feb. 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 243.11 ft (74.100 m) Jan. 12; minimum elevation, 237.54 ft (72.402 m) Jan. 5.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	239.91	239.23	239.98	238.61	241.07	238.27	241.20	241.51	241.98	241.86	241.73	240.44
2	239.79	239.42	239.49	238.41	240.65	238.21	241.27	241.62	241.71	241.84	241.75	240.54
3	239.61	239.42	239.85	238.20	240.34	238.29	241.28	241.71	241.73	241.84	241.78	240.56
4	239.76	239.43	240.36	238.12	240.19	238.35	241.10	241.64	241.76	241.88	241.77	240.40
5	239.75	239.33	240.00	237.73	240.00	238.38	241.59	241.53	241.71	241.81	241.62	240.52
6	240.27	239.23	240.02	237.67	239.83	238.65	241.47	241.43	241.64	241.79	241.71	240.54
7	240.42	239.20	239.84	238.43	239.68	238.64	241.36	241.62	241.60	241.85	241.76	240.31
8	240.32	239.38	240.05	239.67	239.67	238.66	241.52	241.92	242.12	241.84	241.73	240.14
9	239.86	239.40	239.99	239.79	239.68	238.95	241.49	241.91	242.20	241.79	241.73	240.13
10	239.78	239.39	239.77	240.20	239.76	239.13	241.70	241.90	242.00	241.72	241.46	240.22
11	239.91	239.31	239.50	240.99	239.81	239.60	241.97	241.70	241.96	241.87	241.31	240.53
12	239.79	239.24	239.69	242.49	239.64	239.49	241.82	241.71	241.89	241.74	241.34	240.28
13	240.04	239.16	239.18	241.60	239.61	238.90	242.16	241.60	241.89	241.71	241.39	239.81
14	239.88	239.16	239.21	241.37	239.66	238.59	241.77	241.56	241.82	241.76	241.41	239.79
15	239.77	239.25	239.42	241.00	239.64	238.83	241.91	241.70	241.70	241.77	241.48	239.69
16	239.54	239.36	239.84	240.50	239.35	238.74	241.94	241.75	241.58	241.79	241.26	239.77
17	239.42	239.94	239.54	240.50	239.45	238.78	241.99	241.72	241.76	241.68	241.02	240.02
18	239.45	239.51	239.28	241.05	239.66	239.43	242.13	241.84	241.89	241.67	241.05	239.83
19	239.56	239.00	238.80	241.67	239.40	239.82	241.91	241.98	241.69	241.69	241.15	239.76
20	239.81	239.04	238.79	241.93	239.05	240.03	241.84	241.82	241.76	241.74	240.96	239.89
21	239.94	239.14	239.16	241.83	239.24	240.04	241.84	241.82	241.95	241.80	240.75	239.88
22	239.91	239.10	239.15	241.42	238.84	240.36	241.68	242.02	242.00	241.88	240.76	239.90
23	239.80	239.28	238.75	241.60	239.00	240.82	241.42	242.02	241.97	241.94	240.77	239.91
24	239.97	239.41	238.57	241.59	239.35	240.91	241.77	241.96	241.99	241.91	240.77	239.60
25	239.99	239.38	237.93	241.26	239.49	241.03	241.75	241.83	241.97	241.98	240.76	239.49
26	239.87	239.15	238.13	241.45	239.07	241.65	241.58	241.81	241.95	241.89	240.76	239.86
27	239.72	240.28	238.73	241.61	239.06	241.79	241.35	241.93	241.89	241.68	240.78	240.00
28	239.52	240.13	238.99	241.66	238.92	241.80	241.02	241.95	241.69	241.60	240.47	239.99
29	239.50	240.25	239.19	241.64	238.60	241.73	241.01	241.89	241.69	241.77	240.33	239.61
30	239.38	240.30	239.21	241.68	---	241.65	241.29	241.79	241.77	241.88	240.27	239.82
31	239.19	---	238.91	241.39	---	241.40	---	241.84	---	241.89	240.40	---
MEAN	239.79	239.43	239.33	240.55	239.58	239.71	241.60	241.78	241.84	241.80	241.17	240.04
MAX	240.42	240.30	240.36	242.49	241.07	241.80	242.16	242.02	242.20	241.98	241.78	240.56
MIN	239.19	239.00	237.93	237.67	238.60	238.21	241.01	241.43	241.58	241.60	240.27	239.49

CAL YR 1979 MEAN 240.21 MAX 242.51 MIN 236.30
WTR YR 1980 MEAN 240.55 MAX 242.49 MIN 237.67

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY

(National stream-quality accounting network station)
(National radiochemical network station)

LOCATION.--Lat 45°00'22", long 74°47'43", Stormont County, Ontario--St. Lawrence County, N.Y., Hydrologic Unit 04150301, at Robert Moses-Robert H. Saunders power dam on Lake St. Lawrence at the International Boundary at Cornwall, Ontario, 2.9 mi (4.7 km) upstream from Grass River, 6.2 mi (10.0 km) upstream from Raquette River, and 5.9 mi (9.5 km) northeast of Massena, N.Y.. Water-quality samples collected at power dam from taps at generators 17 and 30.

DRAINAGE AREA.--298,800 mi² 773,890 km³.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1860 to current year. Monthly discharges only for some periods published in WSP 1307. Prior to October 1971 published as 04264000 "St. Lawrence River at Ogdensburg."

REVISED RECORDS.--WSP 1437: 1870, 1874, 1881, 1883, 1890.

GAGE.--There is no gage. Discharge is determined from summation of discharge through the Robert Moses-Robert H. Saunders power dam, the Long Sault Dam, the Massena Diversion, the Rasin River Diversion, the Cornwall and Massena municipal water supply, and the Cornwall and the Wiley-Dondero navigation canals. U.S.-Canada coordinated discharge figures supplied by Corps of Engineers. Prior to 1956, base gage at lock 25 at Iroquois Ont. with supplementary gages. August 1956 to June 1958, base gage at lock 24 between Iroquois and Morrisburg, Ont., and supplementary gages. Prior to Aug. 1956, these were gages of the Canadian Hydrographic Service and from August 1956 to June 1958, were gages of the Hydro-Electric Power Commission of Ontario. Discharge in the reach of river at Cornwall, Ont.--near Massena, N.Y. is considered to be the same as discharge at Ogdensburg, N.Y. when adjusted for storage in Lake St. Lawrence.

REMARKS.--Since July 1958, flow regulated by international agreement administered by International St. Lawrence River Board of Control under the International Joint Commission. Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943.

COOPERATION.--Records of daily discharge furnished by Buffalo District, Corps of Engineers through International St. Lawrence River Board of Control.

AVERAGE DISCHARGE.--120 years (1860-1980), 242,700 ft³/s (6,873 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 352,000 ft³/s (9,969 m³/s) June 22, 1976; minimum daily, 139,000 ft³/s (3,940 m³/s) Feb. 7, 1936. Maximum monthly discharge, 350,000 ft³/s (9,910 m³/s) July 1973; minimum monthly, 154,000 ft³/s (4,360 m³/s) Feb. 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 310,000 ft³/s (8,779 m³/s) Jan. 1-7, minimum daily, 220,000 ft³/s (6,230 m³/s) Jan. 19, 20, and Jan. 26-Feb. 3.

DISCHARGE, IN CUBIC FEET PEh SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288000	296000	284000	310000	220000	260000	266000	299000	295000	289000	288000	301000
2	288000	296000	284000	310000	220000	260000	266000	299000	295000	290000	288000	301000
3	288000	293000	284000	310000	220000	260000	266000	302000	295000	289000	288000	301000
4	288000	293000	284000	310000	224000	260000	266000	302000	295000	289000	288000	301000
5	288000	293000	284000	310000	230000	260000	267000	302000	295000	288000	288000	301000
6	288000	293000	284000	310000	240000	260000	267000	302000	295000	288000	288000	305000
7	288000	293000	284000	310000	240000	260000	267000	302000	293000	288000	288000	305000
8	288000	293000	284000	290000	245000	255000	267000	302000	276000	288000	288000	305000
9	288000	293000	284000	279000	250000	255000	267000	302000	293000	289000	291000	305000
10	288000	288000	285000	251000	250000	255000	267000	302000	293000	288000	291000	305000
11	288000	288000	284000	240000	255000	255000	267000	302000	293000	288000	291000	305000
12	288000	288000	284000	240000	260000	255000	275000	302000	293000	288000	291000	306000
13	294000	288000	284000	240000	260000	255000	275000	302000	294000	288000	291000	303000
14	294000	288000	284000	240000	260000	255000	275000	302000	294000	288000	291000	303000
15	294000	288000	284000	240000	260000	255000	275000	301000	294000	288000	291000	303000
16	294000	288000	284000	240000	265000	255000	275000	303000	293000	288000	297000	303000
17	294000	286000	284000	240000	265000	255000	275000	292000	293000	289000	297000	303000
18	294000	286000	284000	240000	265000	255000	275000	292000	290000	288000	297000	303000
19	294000	286000	284000	220000	265000	255000	282000	292000	290000	285000	297000	303000
20	294000	286000	267000	220000	265000	255000	282000	292000	290000	285000	297000	299000
21	294000	286000	284000	231000	265000	255000	285000	292000	289000	285000	297000	299000
22	294000	286000	290000	240000	265000	256000	282000	292000	288000	285000	297000	300000
23	294000	286000	300000	240000	265000	256000	291000	292000	288000	285000	297000	298000
24	294000	282000	300000	240000	265000	257000	266000	287000	288000	285000	297000	299000
25	294000	282000	300000	237000	265000	246000	290000	287000	288000	285000	297000	299000
26	294000	282000	300000	220000	265000	236000	299000	287000	288000	286000	297000	299000
27	296000	282000	300000	220000	265000	236000	299000	287000	288000	288000	297000	296000
28	296000	281000	300000	220000	265000	236000	299000	287000	289000	288000	297000	296000
29	296000	282000	300000	220000	265000	236000	299000	287000	289000	288000	297000	296000
30	296000	282000	300000	220000	---	236000	299000	287000	289000	288000	301000	296000
31	296000	---	305000	220000	---	248000	---	295000	---	288000	301000	---
TOTAL	9052000	8634000	8943000	7858000	7344000	7833000	8331000	9174000	8733000	8914000	9101000	9039000
MEAN	292000	287800	288500	253500	253200	252700	277700	295900	291100	287500	293600	301300
MAX	296000	296000	305000	310000	265000	260000	299000	303000	295000	290000	301000	306000
MIN	288000	281000	267000	220000	220000	236000	266000	287000	276000	285000	288000	296000

CAL YR 1979 TOTAL 100852000 MEAN 276300 MAX 305000 MIN 200000
WTR YR 1980 TOTAL 102956000 MEAN 281300 MAX 310000 MIN 220000

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1966 to current year. Prior to October 1970, published as "near Massena, NY."
CHEMICAL DATA: 1955 (a), 1974 (c), 1975-80 (d).
MINOR ELEMENTS DATA: 1974-77 (b), 1978 (a), 1979 (b), 1980 (c).
RADIOCHEMICAL DATA: 1974-80 (a).
ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-80 (d).
NUTRIENT DATA: 1974-75 (c), 1976-80 (d).
BIOLOGICAL DATA:
Bacteria--1974 (c), 1975-80 (d).
Phytoplankton--1974 (a), 1975-77 (d), 1978-80 (c).
Periphyton--1974 (a), 1975 (c), 1976-80 (b).
SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-80 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURES: October 1955 to October 1958, unpublished; January 1966 to current year.

REMARKS.--Temperature observations made approximately 68 ft (21 m) below normal forebay level. Temperature observations from October 1955 to October 1958 made at Aluminum Company of America Massena Canal power station.

COOPERATION.--Water-temperature record furnished by the Power Authority of the State of New York.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Aug. 7, 1978, Mar. 29, 1979; minimum daily, 250 micromhos Dec. 21, 1978.
WATER TEMPERATURES: Maximum daily, 24.5°C on several days in August and September 1973 and August 1975; minimum daily, freezing point on many days during winter periods except 1972-74, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 375 micromhos Jan. 21; minimum daily, 270 micromhos Sept. 29.
WATER TEMPERATURES: Maximum daily, 24.0°C Aug. 12-14; minimum daily, freezing point on Jan. 21.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 25...	1000	294000	320	8.1	13.0	1.0	10.6	100	K6	K1	130
NOV 26...	1015	282000	330	7.8	9.0	1.0	22.0	98	K2	<1	130
DEC 21...	0945	284000	320	7.8	2.0	1.0	13.4	93	K2	<1	130
JAN 28...	1015	220000	330	7.7	.5	.15	13.3	96	K1	K2	130
FEB 26...	1030	265000	330	7.7	.5	.25	12.0	83	K3	<1	140
MAR 26...	1000	236000	320	7.9	1.0	.50	13.4	99	K5	23	120
APR 28...	1030	299000	321	7.7	6.0	.70	11.8	101	K3	<1	130
MAY 27...	1030	287000	318	8.0	12.5	2.3	10.1	97	K2	<1	120
JUN 25...	1000	288000	324	8.3	16.0	.50	9.0	95	26	<1	130
JUL 28...	1000	288000	312	6.9	22.0	.75	7.2	84	K9	K1	130
AUG 26...	1000	297000	301	7.8	22.5	1.4	8.0	94	K2	K1	120
SEP 29...	1000	296000	270	7.1	16.0	.20	10.0	105	K5	K1	120

K Results based on colony count outside the acceptable range (non-ideal colony count).

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 25...	42	37	8.1	13	1.4	84	34	27	.2	.7	184
NOV 26...	41	39	7.6	13	1.4	88	29	26	.1	.7	180
DEC 21...	42	39	7.9	14	1.4	88	27	25	.1	.6	184
JAN 28...	33	38	7.4	13	1.5	92	28	26	.1	.3	182
FEB 26...	48	42	8.1	13	1.4	90	30	27	.2	.1	178
MAR 26...	36	37	7.5	13	1.5	87	26	25	.1	.2	190
APR 28...	39	39	7.6	12	1.7	90	26	24	.1	.3	195
MAY 27...	32	37	7.4	13	1.1	91	24	23	.1	.1	204
JUN 25...	37	39	7.8	13	1.5	93	25	26	.2	.1	210
JUL 28...	45	38	8.0	13	1.4	83	28	26	.2	.1	203
AUG 26...	43	35	7.8	12	1.5	77	27	25	.2	.5	192
SEP 29...	41	36	7.8	13	1.4	81	26	26	.2	.5	183

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT 25...	172	.11	.12	.01	.00	.48	.29	.49	.29	.60	.41
NOV 26...	170	.18	.17	.03	.00	.36	.31	.39	.31	.57	.48
DEC 21...	169	--	.24	--	.00	--	.34	--	.34	--	.58
JAN 28...	171	.11	.22	.00	.00	.20	.25	.20	.25	.31	.47
FEB 26...	177	.32	.20	.01	.02	.32	.28	.33	.30	.65	.50
MAR 26...	164	.27	.28	.02	.02	.27	.56	.29	.58	.56	.28
APR 28...	166	.23	.30	.07	.11	.16	.03	.23	.14	.46	.44
MAY 27...	161	.11	.22	.03	.03	.25	.15	.28	.18	.39	.40
JUN 25...	170	.16	.24	.02	.15	.28	.32	.30	.47	.46	.71
JUL 28...	165	.12	.16	.06	.18	.64	.21	.70	.39	.82	.55
AUG 26...	156	.10	.18	.02	.17	.29	.20	.31	.37	.41	.55
SEP 29...	160	.11	.10	.00	.05	.19	.14	.19	.19	.30	.29

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT 25...	.020	.010	--	--	--	--	--	--	--	--	--
NOV 26...	.020	.010	--	--	--	--	--	--	--	--	--
DEC 21...	.020	.010	1	1	0	30	0	3	20	10	0
JAN 28...	.010	.010	--	--	--	--	--	--	--	--	--
FEB 26...	.020	.010	1	1	<50	30	0	0	20	10	0
MAR 26...	.020	.010	--	--	--	--	--	--	--	--	--
APR 28...	.020	.010	--	--	--	--	--	--	--	--	--
MAY 27...	.040	.010	--	--	--	--	--	--	--	--	--
JUN 25...	.020	.000	--	--	--	--	--	--	--	--	--
JUL 28...	.050	.030	1	1	<50	30	1	0	10	10	0
AUG 26...	.050	.050	--	--	--	--	--	--	--	--	--
SEP 29...	.020	.010	--	--	--	--	--	--	--	--	--

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 25...	--	--	--	--	--	--	--	--	--	--	--
NOV 26...	--	--	--	--	--	--	--	--	--	--	--
DEC 21...	0	3	2	160	10	3	0	10	1	<.1	<.1
JAN 28...	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	0	3	2	70	10	16	6	10	1	<.1	<.1
MAR 26...	--	--	--	--	--	--	--	--	--	--	--
APR 28...	--	--	--	--	--	--	--	--	--	--	--
MAY 27...	--	--	--	--	--	--	--	--	--	--	--
JUN 25...	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	0	4	4	180	0	1	0	10	1	.1	<.1
AUG 26...	--	--	--	--	--	--	--	--	--	--	--
SEP 29...	--	--	--	--	--	--	--	--	--	--	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
JAN 28...	<2.4	<1.6	<.4	<.3	2.5	2.6	<.4	<.4	.04	.30
JUN 25...	<2.9	<2.0	<.4	<.3	2.5	2.4	<.4	<.4	.05	.33

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT 25...	--	--	--	--	--	--	--	--	1.8	--	--
NOV 26...	--	--	--	--	0	--	--	--	3.4	--	--
DEC 21...	2	0	0	0	0	0	20	20	--	--	.4
JAN 28...	--	--	--	--	--	--	--	--	2.8	--	--
FEB 26...	4	1	0	0	0	0	60	60	--	--	--
MAR 26...	--	--	--	--	0	--	--	--	5.5	--	--
APR 28...	--	--	--	--	--	--	--	--	2.8	--	--
MAY 27...	--	--	--	--	0	--	--	--	1.3	--	--
JUN 25...	--	--	--	--	--	--	--	--	1.0	--	--
JUL 28...	3	2	0	0	0	0	20	10	--	3.3	.3
AUG 26...	--	--	--	--	0	--	--	--	5.1	--	--
SEP 29...	--	--	--	--	--	--	--	--	6.8	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 25...	1000	294000	2	1590
NOV 26...	1015	282000	2	1520
DEC 21...	0945	284000	4	3070
JAN 28...	1015	220000	1	594
FEB 26...	1030	265000	1	715
MAR 26...	1000	236000	3	1910
APR 28...	1030	299000	2	1620
MAY 27...	1030	287000	3	2330
JUN 25...	1000	288000	2	1560
JUL 28...	1000	288000	4	3110
AUG 26...	1000	297000	4	3210
SEP 29...	1000	296000	3	2400

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
Apr. 28 to May 27	29	11.6	9.21	2.02	0.280	Polyethylene strip
May 27 to June 25	29	.551	.394	.090	.000	Polyethylene strip
June 25 to July 28	33	42.7	36.6	28.8	5.46	Polyethylene strip
July 28 to Aug. 26	29	67.4	59.4	12.7	2.48	Polyethylene strip

ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	SEP 25,79	NOV 26,79	MAR 26,80	MAY 27,80
TIME	1000	1015	1000	1030
TOTAL CELLS/ML	580	3200	3700	2600
DIVERSITY: DIVISION	1.5	1.3	0.9	1.8
.CLASS	1.5	1.3	0.9	1.8
..ORDER	1.9	1.6	1.4	2.3
...FAMILY	2.0	2.0	1.5	2.6
....GENUS	2.0	2.3	1.6	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	110	4	130	4	90	3
....CHLORELLA	--	-	1500#	48	75	2	--	-
....CLOSTERIOPSIS	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....OOCYSTIS	13	2	19	1	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	52	9	290	9	190	5	330	13
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	13	2	--	-	57	2	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	13	2	250	8	2600#	70	26	1
....MELOSIRA	--	-	--	-	--	-	26	1
....STEPHANODISCUS	--	-	--	-	--	-	*	0
..PENNALES								
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	76	2	360	10	270	10
....FRAGILARIA	--	-	--	-	--	-	640#	25
....SYNEDRA	--	-	19	1	--	-	*	0
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	52	2
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	--	-	39	1
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	150#	27	--	-	--	-	170	6
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	52	2
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	230	7	--	-	--	-
....ANACYSTIS	52	9	38	1	--	-	410#	16
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	280#	49	650#	20	300	8	460#	18
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUN 25,80	JUL 28,80	AUG 26,80	SEP 29,80
TIME	1000	1000	1000	1000
TOTAL CELLS/ML	1000	630	2100	1600
DIVERSITY: DIVISION	1.8	1.4	1.6	1.8
.CLASS	1.8	1.4	1.6	1.8
..ORDER	2.3	1.5	2.1	2.5
...FAMILY	2.6	2.6	2.9	2.7
....GENUS	3.1	2.8	3.1	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	13	1	13	1
...COELASTRACEAE								
....COELASTRUM	--	-	210#	33	130	6	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	490#	24	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	77	8	51	8	26	1	26	2
....CHLORELLA	--	-	--	-	--	-	--	-
....CLOSTERIOPSIS	--	-	--	-	--	-	13	1
....DICTYOSPHAERIUM	--	-	--	-	--	-	51	3
....OOCYSTIS	--	-	13	2	51	2	--	-
....SELENASTRUM	--	-	--	-	13	1	--	-
....TETRAEDRON	--	-	--	-	13	1	--	-
....TREUBARIA	--	-	--	-	13	1	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	51	2	--	-
....SCENEDESMUS	210#	21	100#	16	77	4	26	2
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	150	7	100	6
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	13	1	--	-	51	2	26	2
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	64	6	26	4	150	7	77	5
....MELOSIRA	77	8	26	4	39	2	300#	18
....STEPHANODISCUS	--	-	--	-	--	-	--	-
..PENNALES								
...FRAGILARIACEAE								
....ASTERIONELLA	90	9	--	-	--	-	--	-
....FRAGILARIA	230#	23	--	-	--	-	--	-
....SYNEDRA	--	-	13	2	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	13	1	--	-	--	-	13	1
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	--	-	--	-	--	-	13	1
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	52	5	77	12	51	2	100	6
...CRYPTOMONADACEAE								
....CRYPTOMONAS	13	1	100#	16	100	5	100	6
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	13	2	630#	31	550#	34
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	150#	15	--	-	--	-	230	14
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	13	1	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04264331 ST. LAWRENCE RIVER AT CORNWALL ONTARIO--NEAR MASSENA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	300	320	320	320	320	320	300	330	320	300	310
2	310	310	310	310	320	320	310	290	340	330	300	310
3	300	320	310	310	320	320	300	---	340	300	310	320
4	310	320	310	310	320	320	320	---	350	310	300	310
5	310	310	320	310	---	320	320	300	340	300	300	320
6	310	320	310	310	---	320	320	300	350	300	300	320
7	300	320	310	---	---	320	300	310	350	310	300	310
8	310	320	300	320	---	320	300	310	---	300	300	350
9	310	320	310	320	---	320	310	310	350	310	300	310
10	310	320	320	320	---	330	310	300	340	310	330	310
11	300	320	340	320	330	330	300	300	340	310	300	310
12	310	320	310	375	330	330	300	310	340	310	300	320
13	300	320	310	315	320	330	340	310	340	310	300	---
14	310	320	310	310	330	320	300	300	350	330	300	---
15	310	320	300	320	330	330	300	310	350	310	300	---
16	310	320	310	320	330	330	300	290	340	310	290	330
17	310	310	350	320	330	330	300	300	340	310	300	340
18	310	320	360	320	340	330	310	300	---	320	---	320
19	310	340	360	320	330	320	300	320	350	---	300	310
20	330	320	310	320	330	330	290	300	350	---	300	320
21	310	340	320	320	330	330	300	300	350	---	290	320
22	310	320	340	---	330	320	300	290	350	300	300	330
23	310	330	340	330	320	330	300	300	350	300	300	320
24	310	330	310	330	330	310	320	300	340	300	300	320
25	310	330	320	325	330	310	310	310	340	300	300	320
26	330	330	320	320	330	320	300	290	---	320	300	320
27	300	340	320	320	330	310	280	310	---	350	310	310
28	310	320	315	320	330	310	280	320	310	310	310	310
29	300	320	310	320	330	300	---	---	300	320	310	270
30	300	320	310	320	---	310	---	---	320	300	310	---
31	300	---	315	320	---	340	---	330	---	330	320	---
MEAN	308	322	319	321	328	322	305	304	340	312	303	317

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	11.5	8.0	2.5	.5	.5	2.0	7.0	13.5	17.0	22.5	22.5
2	17.0	11.5	7.5	3.0	.5	.5	2.0	7.0	13.5	17.0	22.5	22.5
3	17.0	11.0	7.0	2.5	.5	.5	2.0	---	13.0	17.5	22.5	---
4	17.0	11.0	6.0	2.0	.5	.5	2.0	---	13.0	17.5	22.5	21.5
5	17.0	11.0	6.0	2.0	---	.5	2.5	8.0	13.0	17.5	22.5	22.0
6	17.0	11.0	6.0	2.0	---	.5	3.0	8.0	13.0	17.5	23.5	21.5
7	16.0	11.0	6.0	1.5	---	.5	3.0	8.0	14.0	17.0	23.5	21.5
8	16.0	11.0	5.5	1.5	---	.5	4.0	8.0	---	17.0	23.5	21.5
9	15.5	10.5	5.0	1.0	---	.5	4.0	8.0	14.0	17.0	23.5	21.5
10	15.0	10.0	5.0	1.0	---	1.0	4.0	8.0	14.0	18.0	23.5	21.0
11	15.0	10.0	5.0	1.0	.5	.5	5.0	8.0	14.0	18.0	23.5	21.5
12	14.0	10.0	5.0	1.0	.5	.5	4.5	8.5	13.5	18.0	24.0	---
13	14.0	10.0	5.0	.5	.5	.5	5.0	9.0	14.0	18.0	24.0	---
14	13.5	9.5	4.5	.5	.5	.5	5.0	9.0	14.0	18.5	24.0	---
15	13.0	9.0	4.0	.5	.5	.5	5.0	9.0	14.0	19.0	23.5	---
16	12.5	9.0	4.0	.5	.5	.5	5.0	9.0	14.0	19.0	23.0	20.0
17	12.5	8.5	4.0	.5	.5	.5	5.0	9.0	14.0	19.0	23.0	20.0
18	12.5	8.5	3.0	.5	.5	.5	5.0	9.0	14.5	19.0	---	19.5
19	12.5	8.0	3.0	1.0	.5	.5	5.0	10.0	14.5	19.5	23.0	19.0
20	12.5	8.0	2.0	1.0	.5	.5	5.5	---	14.5	20.0	23.0	19.0
21	13.0	8.0	2.0	.0	.5	.5	5.5	---	14.5	20.0	23.0	19.0
22	13.5	8.0	2.0	.5	.5	.5	5.5	---	15.0	21.0	22.5	19.0
23	14.0	8.5	2.5	---	.5	.5	5.5	11.5	15.5	20.5	22.5	19.0
24	13.0	8.5	3.0	.5	.5	1.0	5.5	11.5	16.0	21.0	22.5	18.5
25	13.0	8.5	3.5	.5	.5	1.0	5.5	12.0	16.0	21.0	23.0	18.0
26	12.5	9.0	4.0	.5	.5	1.0	6.0	12.0	---	21.5	23.0	18.0
27	12.0	9.0	3.0	.5	1.0	1.0	6.0	12.5	---	22.0	23.0	17.5
28	12.0	9.0	2.5	.5	.5	1.0	6.0	12.5	16.5	22.0	22.5	17.0
29	12.0	8.5	2.5	.5	.5	1.0	---	13.0	17.0	22.0	22.5	17.0
30	12.0	8.0	2.5	.5	---	1.0	---	13.0	17.0	22.0	22.5	17.0
31	12.0	---	2.5	.5	---	---	---	13.0	---	22.0	22.5	---
MEAN	14.0	9.5	4.0	1.0	.5	.5	4.5	10.0	14.5	19.0	23.0	20.0

434604074361401, revised (042654529) LOST BROOK NEAR RAQUETTE LAKE, NY

LOCATION.--Lat 43°46'04", long 74°36'14", Hamilton County, Hydrologic Unit 04150305, on right bank 0.6 mi (1.0 km) upstream from mouth and Sagamore Lake, 1.3 mi (2.1 km) upstream from Sagamore Lake Outlet, 0.1 mi (0.2 km) downstream from confluence of East Inlet, and 4.0 mi (6.4 km) southeast of Raquette Lake.

DRAINAGE AREA.--17.0 mi^2 (44.1 km^2).

PERIOD OF RECORD.--December 1977 to current year.

REVISED RECORDS.--WRD NY-79-1: 1978 (M).

GAGE.--Water-stage recorder. Altitude of gage is 1,910 ft (582 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 855 ft^3/s (24.21 m^3/s) Apr. 28, 1979, gage height, 8.49 ft (2.588 m); minimum, 2.1 ft^3/s (0.059 m^3/s) July 25, 1979, gage height, 3.11 ft (0.948 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 609 ft^3/s (17.25 m^3/s) Apr. 9, gage height, 8.11 ft (2.472 m); minimum, 3.6 ft^3/s (0.102 m^3/s) Mar. 3, 4, 5, Aug. 30, gage height, 3.35 ft (1.021 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	20	40	15	6.6	3.8	56	56	22	9.0	19	12
2	8.1	21	30	13	6.4	3.7	50	50	30	8.8	30	25
3	7.9	45	25	11	6.0	3.6	46	46	161	8.4	26	72
4	8.2	54	22	9.4	5.8	3.6	52	40	314	7.4	23	54
5	8.6	45	21	8.2	5.6	3.6	86	33	127	6.7	17	52
6	130	34	20	7.6	5.4	3.7	62	29	72	7.0	16	30
7	129	28	20	7.4	5.2	3.8	50	27	52	6.5	14	19
8	74	29	19	7.2	5.0	3.9	72	25	45	6.3	12	13
9	55	27	17	7.6	4.9	4.1	334	22	66	8.8	10	9.9
10	54	60	15	8.6	4.8	4.3	457	21	66	8.0	8.4	8.4
11	45	75	16	10	4.7	4.4	187	19	50	7.2	7.4	8.2
12	35	55	23	14	4.6	4.6	85	19	37	7.8	7.0	6.3
13	37	42	50	27	4.5	4.9	108	19	27	7.4	9.4	5.7
14	37	32	42	28	4.4	5.2	84	27	20	6.5	9.7	7.6
15	33	27	30	27	4.4	5.6	92	28	17	6.0	10	8.8
16	46	23	23	24	4.3	7.0	97	25	23	20	9.2	8.2
17	44	20	19	22	4.3	8.6	59	21	21	23	8.8	7.8
18	40	18	15	19	4.4	14	45	19	17	16	8.4	11
19	36	18	13	17	4.5	21	35	23	14	11	7.8	11
20	32	18	12	15	4.6	35	31	25	15	9.2	7.2	10
21	28	18	11	13	4.5	58	37	22	26	24	6.5	9.7
22	24	19	11	12	4.4	344	36	20	24	33	5.8	9.2
23	21	21	11	11	4.2	231	30	17	19	37	5.2	9.0
24	26	22	15	10	4.0	133	27	15	14	36	4.8	8.2
25	35	27	30	9.6	3.9	83	40	14	11	25	4.4	7.4
26	31	81	91	9.0	3.9	61	67	11	9.7	17	4.1	8.2
27	26	414	68	8.6	3.8	46	59	11	8.4	44	4.0	13
28	22	170	49	8.2	3.8	37	50	9.4	7.8	43	4.0	14
29	22	87	27	7.6	3.8	50	56	8.8	7.2	30	3.8	13
30	23	61	21	7.2	---	64	67	8.2	7.0	37	4.0	11
31	22	---	18	6.8	---	68	---	8.4	---	28	10	---
TOTAL	1148.0	1611	824	401.0	136.7	1323.4	2557	718.8	1330.1	545.0	316.9	482.6
MEAN	37.0	53.7	26.6	12.9	4.71	42.7	85.2	23.2	44.3	17.6	10.2	16.1
MAX	130	414	91	28	6.6	344	457	56	314	44	30	72
MIN	7.9	18	11	6.8	3.8	3.6	27	8.2	7.0	6.0	3.8	5.7
CFSM	2.17	3.15	1.56	.76	.28	2.51	5.00	1.36	2.60	1.03	.60	.95
IN.	2.51	3.52	1.80	.88	.30	2.89	5.58	1.57	2.90	1.19	.69	1.05

CAL YR 1979 TOTAL 14837.5 MEAN 40.7 MAX 580 MIN 2.2 CFSM 2.39 IN 32.39
WTR YR 1980 TOTAL 11394.5 MEAN 31.1 MAX 457 MIN 3.6 CFSM 1.83 IN 24.87

434556074374401, (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY

LOCATION.--Lat 43°45'56", long 74°37'44", Hamilton County, Hydrologic Unit 04150305, on left bank 75 ft (23 m) downstream from bridge on private road at Sagamore Conference Center, 90 ft (27 m) downstream from outlet dam on Sagamore Lake, 0.8 mi (1.3 km) upstream from mouth, and 3.5 mi (5.6 km) southeast of Raquette Lake.

DRAINAGE AREA.--19.1 mi^2 (49.5 km^2).

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,900 ft (579 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 731 ft^3/s (20.7 m^3/s) Apr. 28, 1979, gage height 6.25 ft (1.905 m); minimum, 3.75 ft^3/s (0.11 m^3/s) July 25, 26, 1979, gage height, 3.13 ft (0.954 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 628 ft^3/s (17.8 m^3/s) Apr. 10, gage height, 6.11 ft (1.862 m); minimum daily discharge, 4.2 ft^3/s (0.12 m^3/s) Mar. 3-4.

REVISIONS.--The maximum discharge for water year 1978 has been revised to 435 ft^3/s (12.3 m^3/s) May 10, 1978, gage height, 5.62 (1.713 m); revised daily discharges, in cubic feet per second, for the high water period in May 1978, are given below. These figures supersede those published in the report for 1978.

May 9.................... 269
May 10 388
May 11 237

Month	Total	Mean	Max	Min	Cfsm	In.
May 1978	3535	114	388	26	5.95	6.86
Wtr Yr 1978	16941.8	46.4	388	5.1	2.42	32.87

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	26	55	23	7.6	4.4	64	65	21	12	32	13
2	10	26	45	20	7.4	4.3	61	57	32	13	33	21
3	10	40	38	18	7.0	4.2	57	51	79	12	36	52
4	10	54	33	16	6.8	4.2	58	46	298	11	33	61
5	11	51	31	14	6.4	4.5	90	39	170	10	28	43
6	68	43	29	12	6.2	5.0	83	38	93	10	26	28
7	149	36	30	12	6.0	6.4	64	34	62	9.6	23	21
8	94	35	30	12	6.0	6.4	71	32	51	10	20	16
9	63	33	28	12	5.8	6.4	326	30	60	12	17	13
10	57	52	26	14	5.6	6.0	556	28	69	13	14	12
11	50	79	25	25	5.6	5.8	277	26	58	12	13	11
12	43	64	33	70	5.4	5.8	133	25	47	12	12	9.6
13	41	50	56	60	5.4	5.8	122	25	38	12	12	8.9
14	41	42	56	50	5.4	5.8	115	30	29	12	14	9.6
15	39	35	45	40	5.4	6.4	103	33	24	11	15	11
16	44	30	38	33	5.4	7.6	124	32	26	17	15	12
17	47	27	30	27	5.4	8.2	81	28	27	28	14	11
18	43	24	25	22	5.2	11	63	25	23	28	13	13
19	41	24	21	19	5.2	14	51	28	20	21	12	14
20	39	23	19	17	5.2	20	46	29	20	17	11	15
21	34	23	17	15	5.4	30	46	28	27	23	10	14
22	30	23	17	13	5.6	127	48	26	30	39	9.3	13
23	27	26	17	12	6.0	157	44	23	27	44	8.6	13
24	29	27	21	12	5.6	113	40	22	21	45	7.9	12
25	36	30	42	11	5.4	80	43	19	18	39	7.3	11
26	36	60	79	10	5.2	58	64	17	15	29	7.0	11
27	32	421	68	9.8	4.9	45	69	15	16	39	7.0	13
28	28	220	49	9.4	4.7	36	59	13	12	50	6.7	16
29	28	113	40	8.8	4.6	39	59	13	11	43	6.4	17
30	28	74	32	8.4	---	52	69	12	10	43	6.7	16
31	28	---	27	8.0	---	64	---	13	---	41	9.3	---
TOTAL	1247	1811	1102	633.4	165.8	943.2	3086	902	1434	717.6	479.2	531.1
MEAN	40.2	60.4	35.5	20.4	5.72	30.4	103	29.1	47.8	23.1	15.5	17.7
MAX	149	421	79	70	7.6	157	556	65	298	50	36	61
MIN	10	23	17	8.0	4.6	4.2	40	12	10	9.6	6.4	8.9
CFSM	2.10	3.15	1.85	1.06	.30	1.59	5.37	1.52	2.49	1.21	.81	.92
IN.	2.42	3.51	2.14	1.23	.32	1.83	5.99	1.75	2.78	1.39	.93	1.03

CAL YR 1979 TOTAL 16461.7 MEAN 45.1 MAX 635 MIN 3.8 CFSM 2.35 IN 31.94
WTR YR 1980 TOTAL 13052.3 MEAN 35.7 MAX 556 MIN 4.2 CFSM 1.86 IN 25.33

04266500 RAQUETTE RIVER AT PIERCEFIELD, NY

LOCATION.--Lat 44°14'05", long 74°34'20", St. Lawrence County, Hydrologic Unit 04150305, on left bank 0.5 mi (0.8 km) downstream from powerplant at Piercefield, and 1.5 mi (2.4 km) upstream from Dead Creek.

DRAINAGE AREA.--722 mi^2 (1,870 km^2).

PERIOD OF RECORD.--August 1908 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1387: 1910, 1913, 1914(M), 1916, 1921.

GAGE.--Water-stage recorder. Datum of gage is 1,502.12 ft (457.846 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1912, nonrecording gage at same site (datum of gage lowered 2 ft or 0.6 m Jan. 1, 1911, to present datum).

REMARKS.--Records good except those for winter periods, which are fair. Seasonal distribution of flow modified by natural storage in lakes and ponds upstream from station and by regulation of Forked Lake, Round Lake, Lows Lake, and Raquette Pond (Tupper Lake) at Setting Pole Dam. Extensive diurnal fluctuation caused by powerplant at Piercefield.

AVERAGE DISCHARGE.--72 years, 1,291 ft^3/s (36.56 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,360 ft^3/s (237 m^3/s) May 8, 1972, gage height, 12.25 ft (3.734 m); minimum daily, 4.1 ft^3/s (0.12 m^3/s) Oct. 12, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,990 ft^3/s (113 m^3/s) Apr. 15, gage height, 8.99 ft (2.740 m); minimum, 34.4 ft^3/s (0.974 m^3/s) Sept. 10, gage height, 1.43 ft (0.436 m); minimum daily, 36 ft^3/s (1.02 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	820	1090	2960	1440	656	388	2030	2360	677	587	1110	360
2	804	957	2850	1250	598	364	2140	2330	793	622	1300	966
3	805	1020	2800	1130	544	384	2150	2210	578	660	1490	1040
4	786	1080	2690	1020	594	498	2190	2120	752	696	1480	1090
5	734	1140	2620	981	623	406	2290	2100	734	579	1300	1050
6	721	1180	2490	986	575	362	2370	1960	1010	480	1200	888
7	1020	1270	2420	1060	561	412	2410	1860	1260	491	1120	828
8	1380	1220	2350	967	494	383	2440	1790	1370	577	1040	478
9	1540	1260	2260	949	434	392	2590	1650	1420	793	961	290
10	1750	1280	2130	949	426	403	2760	1510	1390	893	812	36
11	1770	1270	2090	899	409	410	2950	1420	1360	723	956	232
12	1680	1300	2040	830	314	407	3180	1350	1320	875	1000	361
13	1640	1370	1910	890	345	403	3470	1250	1350	692	1050	451
14	1540	1430	1780	1060	365	408	3720	1180	1310	635	1030	643
15	1540	1440	1700	1110	396	417	3870	1190	1230	432	1300	912
16	1530	1440	1690	1200	356	432	3910	1190	1170	450	1330	1050
17	1580	1430	1590	1170	401	429	3960	1170	1080	513	1320	928
18	1490	1350	1350	1140	415	497	3920	1210	1060	501	1160	880
19	1440	1320	1040	1040	413	533	3840	1200	1070	449	1140	905
20	1410	1180	899	991	359	688	3710	1180	1070	401	932	877
21	1390	1060	977	945	362	859	3520	1150	1070	384	881	855
22	1430	905	926	958	367	1060	3350	1190	1070	511	693	915
23	1410	1000	1210	953	414	1140	3160	1150	903	718	451	932
24	1390	1090	1350	923	413	1280	3030	1130	1050	1060	453	1230
25	1400	1220	1470	726	409	1580	2910	1100	902	1370	473	1230
26	1380	1350	1800	728	403	1730	2790	920	928	1470	485	1120
27	1210	1950	1940	761	401	1710	2700	867	684	1390	556	1000
28	1190	2540	1870	721	401	1690	2620	595	862	1270	504	946
29	1190	2930	1780	698	391	1590	2530	704	715	1350	465	925
30	1130	3000	1740	478	---	1550	2470	768	714	1220	484	912
31	1160	---	1590	603	---	1760	---	683	---	1340	717	---
TOTAL	40260	42072	58312	29556	12839	24565	88980	42487	30902	24132	29193	24330
MEAN	1299	1402	1881	953	443	792	2966	1371	1030	778	942	811
MAX	1770	3000	2960	1440	656	1760	3960	2360	1420	1470	1490	1230
MIN	721	905	899	478	314	362	2030	595	578	384	451	36

CAL YR 1979 TOTAL 593232 MEAN 1625 MAX 5700 MIN 95
WTR YR 1980 TOTAL 447628 MEAN 1223 MAX 3960 MIN 36

04267500 RAQUETTE RIVER AT SOUTH COLTON, NY

LOCATION.--Lat 44°30'42", long 74°53'00", St. Lawrence County, Hydrologic Unit 04150305, on left bank 300 ft (91 m) upstream from bridge on State Highway 56 at South Colton, 500 ft (152 m) downstream from Niagara Mohawk Power Corp. powerplant, and 0.8 mi (1.3 km) upstream from Cold Brook.

DRAINAGE AREA.--939 mi^2 (2,432 km^2).

PERIOD OF RECORD.--January 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 882.05 ft (268.849 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated 16 mi (26 km) upstream by Carry Falls Reservoir since 1953: considerable natural storage in large lakes above Piercefield. Large diurnal fluctuation caused by five powerplants.

AVERAGE DISCHARGE.--27 years, 1,751 ft^3/s (49.59 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,720 ft^3/s (275 m^3/s) May 11, 1971, gage height, 9.80 ft (2.987 m); minimum, 1.3 ft^3/s (0.037 m^3/s) Feb. 1, 1962, Aug. 8, 1964, gage height, 1.53 ft (0.466 m); minimum daily, 4.6 ft^3/s (0.13 m^3/s) June 2, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,150 ft^3/s (146 m^3/s) July 10, gage height, 7.22 ft (2.201 m); minimum, 13 ft^3/s (0.37 m^3/s) Oct. 2, gage height, 1.76 ft (0.536 m); minimum daily, 43 ft^3/s (1.22 m^3/s) June 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	1850	2950	2100	1160	391	4070	2940	490	1190	1610	670
2	1360	1680	2890	2300	1400	639	3650	2810	1270	1580	1340	1150
3	1450	2050	3180	2750	989	300	3640	2100	1100	1510	794	1360
4	1530	1450	2970	2560	1560	1090	3410	2400	1500	367	1810	1660
5	1370	1660	3450	2250	1340	951	3430	2480	1120	677	1490	1880
6	1480	1900	3440	2170	1240	849	3480	2000	1570	59	1380	1450
7	1690	1770	3410	2350	1280	719	3640	2000	213	1280	1380	1550
8	1300	1600	2770	1970	1360	662	3020	2360	533	1220	1470	1280
9	1720	2030	3560	1650	957	635	2180	2170	1610	1340	1290	1680
10	1570	1730	3670	1850	721	867	3090	2100	1410	1500	1080	1440
11	1760	1710	3480	1640	1330	1090	2490	1820	1230	1090	1110	1700
12	1390	1760	3390	737	1440	1170	2630	2280	1220	642	1340	1590
13	255	1870	3050	880	955	1040	2380	2300	757	702	1730	470
14	1970	1990	3460	1950	861	680	2970	1640	43	815	1380	528
15	1450	1860	3650	1690	833	560	1970	2440	577	1610	1330	1280
16	1930	2200	3310	1550	1230	255	1500	1770	1880	1510	76	1790
17	1340	1600	3580	1510	671	538	1790	1810	1760	1420	212	1750
18	1790	1930	3320	1260	1420	821	1600	1610	1300	1610	1720	1670
19	1700	1760	2910	1430	981	732	1190	1620	1200	637	1400	1700
20	1770	2220	2400	834	1110	757	1800	1710	1260	593	1250	1510
21	1360	1860	1540	2040	1460	1140	2070	1670	752	1350	1140	1820
22	2630	1730	1600	1560	789	1080	1710	1690	358	1400	1520	1540
23	1330	1960	990	1370	1400	732	1480	1600	1340	1650	1620	1020
24	1840	1450	1910	1820	533	1580	1920	1660	964	1490	1180	898
25	1950	2110	1620	1380	1290	1330	1530	1510	1480	1810	1760	1470
26	1620	1810	1890	1170	1010	1510	1420	1440	1580	1090	1800	1370
27	1590	2340	1900	1020	1250	2090	1210	1380	1620	1000	1100	1640
28	1600	2180	1800	1540	829	2550	1890	1570	1180	1140	1750	1650
29	1560	2730	1700	1430	934	3600	2580	1600	175	1560	1480	1670
30	1750	3350	2000	1500	---	3610	2620	1440	1340	1780	1080	1700
31	1820	---	2500	1210	---	3870	---	694	---	1480	491	---
TOTAL	49185	58140	84290	51471	32333	37838	72360	58614	32832	37102	40113	42886
MEAN	1587	1938	2719	1660	1115	1221	2412	1891	1094	1197	1294	1430
MAX	2630	3350	3670	2750	1560	3870	4070	2940	1880	1810	1810	1880
MIN	255	1450	990	737	533	255	1190	694	43	59	76	470

CAL YR 1979 TOTAL 770351 MEAN 2111 MAX 7270 MIN 36
WTR YR 1980 TOTAL 597164 MEAN 1632 MAX 4070 MIN 43

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°50'20", long 74°58'45", St. Lawrence County, Hydrologic Unit 04150305, on right bank 250 ft (76 m) upstream from bridge on Grant Road at Raymondville, 0.3 mi (0.5 km) downstream from Trout Brook, 0.4 mi (0.6 km) downstream from Niagara Mohawk Power Corp. powerplant, and 18.0 mi (29.0 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,131 mi^2 (2,929 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 183.33 ft (55.879 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Extensive diurnal fluctuation caused by power and industrial operations. Flow regulated since 1953 by Carry Falls Reservoir, about 46 mi (74 km) upstream and by Niagara Mohawk Power Corp. powerplant, 0.4 mi (0.6 km) upstream; considerable natural storage in large lakes above Piercefield.

AVERAGE DISCHARGE.--36 years (1944-80), 2,040 ft^3/s (57.77 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s (368 m^3/s) Apr. 5, 1974, gage height, 8.40 ft (2.560 m); maximum gage height, 9.24 ft (2.816 m) Feb. 22, 1954 (backwater from ice); minimum discharge, 2.2 ft^3/s (0.062 m^3/s) Sept. 18, 19, 1966; minimum daily, 7.0 ft^3/s (0.20 m^3/s) Oct. 15, 1951; minimum gage height, 0.42 ft (0.128 m) July 13, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,890 ft^3/s (167 m^3/s) Apr. 10, gage height, 5.24 ft (1.597 m); maximum gage height, 5.50 ft (1.676 m) Feb. 2 (backwater from ice); minimum discharge, 16 ft^3/s (0.45 m^3/s) Mar. 11, gage height, 0.58 ft (0.177 m); minimum daily, 305 ft^3/s (8.6 m^3/s) June 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1640	2150	4200	2400	1400	1000	4830	3840	735	1550	1510	759
2	1710	2070	4200	2300	1400	1200	4510	3630	1040	1410	1790	1460
3	1740	2100	4000	2200	1400	1400	3940	2900	1420	1480	1690	2100
4	1850	2120	4000	2100	1300	1600	3860	2470	1420	888	1580	2010
5	1470	2320	4000	2000	1300	1600	4100	2320	1470	508	1560	1940
6	1610	2280	4000	1900	1300	1600	4140	2390	1480	473	1510	1870
7	1480	2100	3910	1900	1300	1400	4080	2440	962	1030	1570	1810
8	1220	1990	3940	1900	1300	1200	3980	2490	530	1300	1460	1820
9	2100	1900	3660	1900	1300	936	3590	2430	1120	1200	1440	1780
10	1970	2190	3690	1900	1200	1300	5350	2410	1620	1480	1540	1840
11	2070	2350	3720	1700	1200	1320	4380	2390	1540	1540	1400	1750
12	2470	2220	3980	1500	1100	1380	3570	2280	1640	1110	1610	1550
13	1860	2240	4010	1900	1100	1300	3480	2380	1740	583	1900	785
14	1900	2100	3860	1800	1000	1200	3190	2360	1440	1120	1450	780
15	1790	2160	3770	1700	1000	1000	3560	2860	930	1550	1620	1670
16	1540	2300	3840	1700	1100	754	2520	2020	305	1440	1050	1970
17	1710	2860	3830	1600	1400	830	2220	1920	591	1430	614	1920
18	1700	2380	3700	1600	1600	2000	2180	1850	1510	1900	1140	1910
19	1740	2210	3300	1600	1500	2200	2130	1540	1440	1280	1330	1860
20	1870	2220	2900	1600	1500	2100	2070	1680	1400	556	1400	1710
21	1960	2160	2400	1600	1500	2100	2070	1820	1030	1240	1460	1830
22	2030	2190	2100	1500	1600	2100	1960	2100	599	1740	1650	1870
23	2620	2100	1980	1600	1500	2000	1930	1890	909	1950	1550	1990
24	1780	2100	2150	1600	1400	1900	1900	1410	1470	1890	1670	1970
25	1730	2200	2600	1500	1500	2100	1960	1820	1370	1870	1400	1940
26	1380	4000	3700	1500	1500	2690	1990	1790	1480	1350	1810	1960
27	1850	5200	3430	1500	1400	2760	2020	1780	1420	1030	1850	2070
28	1890	4800	3140	1500	1400	3050	1970	1750	1490	1500	1870	2000
29	1930	4600	2900	1500	1300	4170	2390	1510	899	1880	1850	1720
30	1610	4400	2700	1500	---	4420	2600	1490	1100	1860	1330	1840
31	2020	---	2500	1400	---	4610	---	1060	---	1560	749	---
TOTAL	56240	78010	106110	53900	38800	59220	92470	67020	36100	41698	46353	52484
MEAN	1814	2600	3423	1739	1338	1910	3082	2162	1203	1345	1495	1749
MAX	2620	5200	4200	2400	1600	4610	5350	3840	1740	1950	1900	2100
MIN	1220	1900	1980	1400	1000	754	1900	1060	305	473	614	759

CAL YR 1979 TOTAL 934564 MEAN 2560 MAX 7720 MIN 424
WTR YR 1980 TOTAL 728405 MEAN 1990 MAX 5350 MIN 305

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1957, 1960-61, 1969-72, 1979 to current year.
  CHEMICAL DATA: 1955 (a), 1957 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979-80 (d).
  MINOR ELEMENTS DATA: 1969 (a), 1970, 1979 (b), 1980 (d).
  PESTICIDE DATA: 1970 (a).
  ORGANIC DATA: OC--1979-80 (d).
  NUTRIENT DATA: 1955 (a), 1957 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979-80 (d).
  BIOLOGICAL DATA:
    Bacteria--1969-71 (a), 1979-80 (d).
    Phytoplankton--1979-80 (c).
    Periphyton--1979-80 (b).
  SEDIMENT DATA: 1979 (c), 1980 (d).

PERIOD OF DAILY RECORD.--
  SPECIFIC CONDUCTANCE: October 1959 to September 1961 (unpublished), April to September 1979.
  WATER TEMPERATURES: October 1959 to September 1961, April to September 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
22...	1000	2000	55	6.7	14.0	2.0	10.4	100	260	32	23
NOV											
19...	1000	2310	53	6.8	3.0	1.0	13.1	97	150	K33	21
DEC											
06...	1230	3830	48	6.9	2.0	1.0	13.6	99	120	31	22
JAN											
09...	1145	1890	45	6.2	.0	.20	14.8	101	K60	K27	17
FEB											
12...	1115	1100	48	6.2	2.0	.80	13.4	98	150	K24	17
MAR											
11...	1100	1960	67	6.5	2.0	.40	13.8	101	110	K30	22
APR											
08...	1130	4040	49	6.9	6.5	.50	12.1	99	K160	K3	20
MAY											
08...	1045	2570	--	7.1	11.0	.75	10.4	97	400	23	17
JUN											
02...	1200	1590	55	6.4	17.5	.55	8.3	89	37	K9	18
JUL											
08...	0800	1620	52	6.5	21.5	1.0	7.2	84	K210	160	17
AUG											
07...	1215	1730	58	6.6	24.0	1.0	6.7	81	70	K36	21
SEP											
17...	1245	1900	58	6.4	18.0	.40	8.7	94	54	K19	24

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
22...	12	6.5	1.7	1.6	.4	11	7.8	1.7	.1	4.7	44
NOV											
19...	13	5.6	1.6	1.6	.5	8	7.2	1.5	.1	5.3	46
DEC											
06...	10	6.0	1.7	--	.3	12	6.9	1.3	.1	5.3	47
JAN											
09...	1	4.8	1.1	1.4	.4	16	8.7	1.5	.1	6.2	44
FEB											
12...	6	5.0	1.1	1.8	.5	11	8.5	2.0	.1	7.1	38
MAR											
11...	11	6.1	1.6	2.0	.6	11	9.0	3.5	.1	7.2	52
APR											
08...	4	5.4	1.5	1.7	.6	16	6.8	2.0	.1	5.7	40
MAY											
08...	10	4.7	1.2	1.4	.5	7	7.1	1.6	.1	4.2	39
JUN											
02...	9	5.0	1.3	1.5	.5	9	7.1	1.6	.1	3.8	38
JUL											
08...	8	4.8	1.3	1.5	.5	9	8.1	1.5	.1	3.4	43
AUG											
07...	7	5.6	1.7	1.8	.6	14	7.4	1.8	.1	3.9	61
SEP											
17...	5	6.3	2.0	1.9	.6	19	7.3	1.9	.1	4.1	66

K Results based on colony count outside the acceptable range (non-ideal colony count).

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT 22...	32	.14	.17	.00	.01	.82	.92	.82	.93	.96	1.1
NOV 19...	29	.13	.15	.03	.01	.43	.39	.46	.40	.59	.55
DEC 06...	--	.19	.18	.00	.03	.29	.15	.29	.18	.48	.36
JAN 09...	35	.47	.26	.08	.07	.30	.31	.38	.38	.85	.64
FEB 12...	34	.06	.20	.04	.06	.44	.47	.48	.53	.54	.73
MAR 11...	39	.41	.42	.01	.05	.25	.23	.26	.28	.67	.70
APR 08...	35	.32	.33	.02	.02	.32	.32	.34	.34	.66	.67
MAY 08...	26	.31	.33	.03	.02	.28	.16	.31	.18	.62	.51
JUN 02...	27	.27	.26	.06	.04	.36	.28	.42	.32	.69	.58
JUL 08...	28	.23	.22	.02	.02	.32	.16	.34	.18	.57	.40
AUG 07...	32	.19	.19	.03	.00	.10	.21	.13	.21	.32	.40
SEP 17...	36	.17	.19	.00	.01	.20	.21	.20	.22	.37	.41

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 22...	.020	.010	--	--	--	--	--	--	--	--	--
NOV 19...	.010	.010	--	--	--	--	--	--	--	--	--
DEC 06...	.010	.010	1	0	0	0	1	0	<10	<10	0
JAN 09...	.010	.010	--	--	--	--	--	--	--	--	--
FEB 12...	.010	.010	--	--	--	--	--	--	--	--	--
MAR 11...	.020	.010	1	1	<50	20	0	0	20	10	0
APR 08...	.020	.010	--	--	--	--	--	--	--	--	--
MAY 08...	.020	.000	--	--	--	--	--	--	--	--	--
JUN 02...	.030	.010	--	--	--	--	--	--	--	--	--
JUL 08...	.010	.000	--	--	--	--	--	--	--	--	--
AUG 07...	.020	.010	1	1	100	<50	0	0	30	20	0
SEP 17...	.000	.000	--	--	--	--	--	--	--	--	--

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--
NOV 19...	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	0	2	2	350	0	14	0	20	0	<.1	<.1
JAN 09...	--	--	--	--	--	--	--	--	--	--	--
FEB 12...	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	0	2	2	130	110	10	8	20	10	<.1	<.1
APR 08...	--	--	--	--	--	--	--	--	--	--	--
MAY 08...	--	--	--	--	--	--	--	--	--	--	--
JUN 02...	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	0	0	2	280	100	6	0	30	20	.2	<.1
SEP 17...	--	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)
OCT 22...	--	--	--	--	--	--	--	--	7.9	--	--
NOV 19...	--	--	--	--	0	--	--	--	6.2	--	--
DEC 06...	1	0	0	0	0	0	10	5	--	3.9	.5
JAN 09...	--	--	--	--	--	--	--	--	6.6	--	--
FEB 12...	--	--	--	--	0	--	--	--	5.3	--	--
MAR 11...	0	0	0	0	0	0	30	9	--	13	.5
APR 08...	--	--	--	--	0	--	--	--	3.5	--	--
MAY 08...	--	--	--	--	0	--	--	--	4.1	--	--
JUN 02...	--	--	--	--	--	--	--	--	3.5	--	--
JUL 08...	--	--	--	--	0	--	--	--	2.4	--	--
AUG 07...	0	0	0	0	0	0	20	20	--	18	.1
SEP 17...	--	--	--	--	--	--	--	--	4.7	--	--

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 22...	1000	1930	2	10
NOV 19...	1000	2310	2	12
DEC 06...	1230	3830	3	31
JAN 09...	1145	1890	2	10
FEB 12...	1115	1850	3	15
MAR 11...	1100	1960	1	5.3
APR 08...	1130	4040	4	44
JUN 02...	1200	1590	2	8.6
JUL 08...	0800	1620	3	13
AUG 07...	1215	1670	4	18
SEP 17...	1245	1900	1	5.1

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
Apr. 8 to May 8	30	1.89	1.58	1.07	1.28	Polyethylene strip
May 8 to June 2	25	.709	.394	.130	.000	Polyethylene strip
July 31 to Aug. 7	30	.787	.630	.770	.020	Polyethylene strip
Aug. 7 to Sept. 17	41	11.2	8.43	19.7	.000	Polyethylene strip

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

QUALITATIVE AND ASSOCIATED ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	SEP 12,79 0930	NOV 19,79 1000	MAR 11,80 1100	MAY 8,80 1045
TOTAL CELLS/ML	320	270	130	130
DIVERSITY: DIVISION	0.9	0.6	0.0	0.9
.CLASS	0.9	0.6	0.0	0.9
..ORDER	1.2	0.6	0.5	1.6
...FAMILY	2.8	0.6	2.0	2.4
....GENUS	3.1	0.7	2.0	2.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...CHLOROCOCCACEAE								
....CHLOROCOCCUM	20	6	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	39#	30
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	13	10
....CHLORELLA	10	3	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....OOCYSTIS	5	2	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	60#	19	--	-	--	-	26#	20
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	26#	20
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....COSCINODISCUS	--	-	--	-	--	-	--	-
....CYCLOTELLA	20	6	--	-	13	10	--	-
....MELOSIRA	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	100#	32	--	-	13	10	--	-
....COCCONEIS	10	3	--	-	--	-	--	-
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	--	-	--	-
....CYMBELLA	5	2	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	65#	50	--	-
...FRAGILARIACEAE								
....FRAGILARIA	20	6	--	-	--	-	--	-
....HANNAEA	5	2	--	-	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	15	5	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	30	10	13	5	--	-	13	10
....PINNULARIA	--	-	26	10	--	-	--	-
...NITZSCHIACEA								
....NITZSCHIA	15	5	--	-	13	10	--	-
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	26#	20	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	230#	86	--	-	--	-
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	--	-	--	-	--	-	13	10
..PERIDINIALES								
...PERIDINIACEAE								
....PERIDINIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

QUALITATIVE AND ASSOCIATED ANALYSES OF BIOLOGICAL DATA, SEPTEMBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	JUN 2,80	JUL 8,80	AUG 7,80	SEP 17,80
TIME	1200	0800	1215	1245
TOTAL CELLS/ML	1200	330	100	230
DIVERSITY: DIVISION	1.5	0.7	1.4	1.1
.CLASS	1.5	0.7	1.4	1.1
..ORDER	1.8	1.5	1.8	2.0
...FAMILY	2.1	1.6	1.8	2.6
....GENUS	2.5	1.6	1.8	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	13	6
...CHLOROCOCCACEAE								
....CHLOROCOCCUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	14	1	--	-	--	-	--	-
....CHLORELLA	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	58	5	--	-	--	-	--	-
....OOCYSTIS	86	7	--	-	26#	25	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	160	14	--	-	--	-	--	-
....SCENEDESMUS	86	7	--	-	--	-	26	11
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	58	5	--	-	13	13	13	6
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....COSCINODISCUS	--	-	--	-	--	-	39#	17
....CYCLOTELLA	58	5	39	12	--	-	39#	17
....MELOSIRA	14	1	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	26	11
....COCCONEIS	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....AMPHORA	--	-	13	4	--	-	--	-
....CYMBELLA	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	--	-
....HANNAEA	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	14	1	--	-	13	13	13	6
....PINNULARIA	--	-	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	13	4	--	-	--	-
...TABELLARIACEAE								
....TABELLARIA	14	1	--	-	--	-	51#	22
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	580#	49	64#	19	52#	50	13	6
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	210#	62	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	--	-	--	-	--	-	--	-
..PERIDINIALES								
...PERIDINIACEAE								
....PERIDINIUM	29	2	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°51'49", long 74°46'45", St. Lawrence County, Hydrologic Unit 04150306, on left bank 600 ft (183 m) upstream from highway bridge at Brasher Center, and 6.5 mi (10.5 km) downstream from West Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--616 mi² (1,595 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 584: Drainage area. WSP 1387: 1910-16, 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 217.23 ft (66.212 m) National Geodetic Vertical Datum of 1929. Prior to June 24, 1916, nonrecording gage at site 600 ft (183 m) downstream at different datum. June 24, 1916 to Nov. 10, 1917, and Jan. 1, 1919 to Aug. 13, 1920, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Slight diurnal fluctuation caused by powerplant operations above station.

AVERAGE DISCHARGE.--70 years, 1,043 ft³/s (29.54 m³/s), 23.00 in/yr (584 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) Apr. 6, 1937, gage height, 12.82 ft (3.908 m); maximum gage height recorded, about 15.3 ft (4.66 m) Apr. 6, 1937 (ice jam); minimum discharge observed, about 34 ft³/s (0.96 m³/s) Aug. 8, 1917, gage height, 5.25 ft (1.600 m); minimum daily, 37 ft³/s (1.05 m³/s) Aug. 8, 1917.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,340 ft³/s (123 m³/s) Apr. 10, gage height, 8.68 ft (2.646 m), no peak above base of 5,600 ft³/s (159 m³/s); minimum, 184 ft³/s (5.21 m³/s) June 28, gage height, 5.79 ft (1.765 m); minimum daily, 224 ft³/s (6.34 m³/s) Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	940	1930	920	280	370	2850	1120	542	450	493	620
2	374	900	1650	820	280	370	2450	1040	775	420	569	1320
3	361	940	1380	740	280	360	2140	977	681	400	783	1980
4	360	900	1230	660	270	340	2080	908	600	347	1030	1590
5	350	800	1160	600	270	340	3260	852	533	297	1020	1210
6	500	760	1120	540	270	330	3240	808	643	259	800	976
7	1100	760	1300	520	270	350	2590	797	562	233	770	796
8	1100	760	1420	500	270	370	2280	786	363	252	667	638
9	1100	860	1230	480	280	400	2960	786	369	460	491	544
10	1200	1100	1160	470	290	420	4170	797	420	545	400	528
11	1200	1400	1120	480	310	440	3470	765	480	520	341	527
12	1200	1600	1300	600	320	460	2850	733	489	625	525	472
13	1200	1400	1650	720	320	470	3100	691	437	598	748	400
14	1200	1300	1540	780	320	450	2970	524	390	449	649	515
15	1200	1400	1250	720	320	440	2700	670	359	350	825	1020
16	1000	1300	860	660	320	430	2490	670	393	308	634	904
17	940	1100	800	620	310	490	2110	581	395	364	585	745
18	860	1200	780	580	310	580	1780	571	363	759	519	625
19	820	1000	760	540	310	700	1550	681	340	969	427	594
20	780	800	760	500	320	900	1360	640	334	746	372	589
21	960	799	740	450	330	1300	1290	775	338	545	347	536
22	1100	817	720	400	350	1800	1220	733	342	648	318	849
23	1000	981	800	370	360	2180	1120	630	320	792	288	1500
24	1100	1130	1130	340	370	2130	1020	552	292	753	256	1400
25	1300	1110	2030	320	380	2240	1040	514	272	615	240	1170
26	1100	1200	4060	300	380	2490	1270	470	257	479	228	1050
27	960	3440	3040	290	370	2150	1310	427	245	405	224	1020
28	880	3370	2110	290	370	2090	1230	347	229	359	533	949
29	940	2810	1600	290	370	2440	1290	378	239	384	708	841
30	1000	2350	1300	280	---	2580	1220	386	295	539	652	739
31	1100	---	1100	280	---	2960	---	371	---	572	544	---
TOTAL	28664	39227	43030	16060	9200	33370	64410	20980	12297	15442	16986	26647
MEAN	925	1308	1388	518	317	1076	2147	677	410	498	548	888
MAX	1300	3440	4060	920	380	2960	4170	1120	775	969	1030	1980
MIN	350	760	720	280	270	330	1020	347	229	233	224	400
CFSM	1.50	2.12	2.25	.84	.52	1.75	3.49	1.10	.67	.81	.89	1.44
IN.	1.73	2.37	2.60	.97	.56	2.02	3.89	1.27	.74	.93	1.03	1.61

CAL YR 1979 TOTAL 428600 MEAN 1174 MAX 6350 MIN 184 CFSM 1.91 IN 25.88
WTR YR 1980 TOTAL 326313 MEAN 892 MAX 4170 MIN 224 CFSM 1.45 IN 19.71

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1960, 1970-72, 1974 to current year.
CHEMICAL DATA: 1955 (a), 1960 (b), 1970-72 (a), 1975-80 (d).
MINOR ELEMENTS DATA: 1975, 1977-79 (b), 1980 (c).
ORGANIC DATA: OC--1974 (b), 1978-80 (d).
NUTRIENT DATA: 1970-71 (a), 1975-80 (d).
BIOLOGICAL DATA:
Bacteria--1975-80 (d).
Phytoplankton--1975-77 (d), 1978-80 (c).
Periphyton--1975-80 (b).
SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-80 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1974 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1975; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 25.0°C July 28 to Aug. 2; minimum daily, freezing point Dec. 6 to Apr. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 04...	1045	375	78	7.3	15.0	1.0	9.4	94	K60	K9	36
NOV 20...	1115	798	75	7.1	2.0	1.0	14.2	102	67	K14	32
DEC 12...	1030	1270	67	7.3	.5	2.0	14.4	100	180	180	29
JAN 11...	1015	490	83	7.0	1.5	.70	13.4	95	56	K12	34
FEB 13...	1130	340	92	6.8	2.0	.50	13.0	94	21	K1	37
MAR 12...	1215	469	94	6.7	2.0	.50	13.6	98	K6	K13	38
APR 09...	1145	2760	52	6.7	7.0	1.5	11.4	97	56	59	22
MAY 06...	0915	835	68	6.5	13.0	.70	8.8	87	K11	20	27
JUN 04...	0945	570	69	6.8	17.5	.30	8.1	87	80	22	29
JUL 08...	1015	236	81	7.0	20.0	1.0	7.0	79	110	45	35
AUG 18...	1015	480	76	6.7	20.0	1.2	7.7	87	110	28	36
SEP 17...	0930	780	76	6.8	16.5	.60	9.2	97	93	57	34

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 04...	9	9.4	3.0	1.9	.5	27	9.1	2.0	.1	5.7	--
NOV 20...	2	8.3	2.7	1.7	.4	30	7.5	1.6	.1	7.7	60
DEC 12...	4	7.6	2.5	1.5	.4	25	7.9	1.4	.1	7.4	55
JAN 11...	2	8.9	2.8	1.8	.6	32	9.7	1.8	.1	9.5	64
FEB 13...	4	9.6	3.1	2.2	.5	33	8.3	1.8	.1	11	68
MAR 12...	11	9.8	3.4	4.6	1.5	27	11	5.8	.1	10	66
APR 09...	10	5.8	1.7	2.7	.7	12	6.8	1.4	.1	4.7	52
MAY 06...	7	7.1	2.2	1.5	.6	20	7.6	1.6	.1	4.3	51
JUN 04...	5	7.5	2.4	1.6	.4	24	7.7	1.4	.1	5.1	54
JUL 08...	9	8.9	3.1	2.0	.5	26	7.7	1.7	.1	4.8	61
AUG 18...	5	9.6	3.0	1.8	.4	31	6.3	1.7	.1	6.8	66
SEP 17...	4	8.7	3.0	1.7	.5	30	6.4	1.8	.1	7.5	82

K Results based on colony count outside the acceptable range (non-ideal colony count).

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT 04...	48	.06	.07	.01	.01	.39	.42	.40	.43	.46	.50
NOV 20...	49	.19	.19	.01	.00	.46	.34	.47	.34	.66	.53
DEC 12...	45	.22	.23	.01	.01	.24	.17	.25	.18	.47	.41
JAN 11...	56	.45	.39	.01	.04	.35	.20	.36	.24	.81	.63
FEB 13...	58	.17	.30	--	.04	--	.14	.40	.18	--	.48
MAR 12...	65	.55	.52	.47	.48	.73	1.0	1.2	1.5	1.8	2.0
APR 09...	33	.28	.27	.03	.02	.31	.18	.34	.20	.62	.47
MAY 06...	38	.15	.16	.01	.02	.39	.32	.40	.34	.55	.50
JUN 04...	42	.18	.20	.03	.04	.29	.31	.32	.35	.50	.55
JUL 08...	45	.08	.08	.03	.02	.26	.28	.29	.30	.37	.38
AUG 18...	49	.09	.10	.03	.04	.31	.28	.34	.32	.43	.42
SEP 17...	48	.10	.11	.00	.00	.24	.18	.24	.18	.34	.29

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 04...	.010	.010	--	--	--	--	--	--	--	--	--
NOV 20...	.000	.010	--	--	--	--	--	--	--	--	--
DEC 12...	.020	.010	0	0	0	10	2	0	10	10	2
JAN 11...	.010	.000	--	--	--	--	--	--	--	--	--
FEB 13...	.020	.010	--	--	--	--	--	--	--	--	--
MAR 12...	.040	.030	1	1	<50	20	0	3	20	<10	0
APR 09...	.020	.020	1	1	<50	20	3	4	10	10	0
MAY 06...	.010	.000	--	--	--	--	--	--	--	--	--
JUN 04...	.020	.010	--	--	--	--	--	--	--	--	--
JUL 08...	.010	.000	0	0	<50	20	0	0	30	<10	0
AUG 18...	.020	.010	--	--	--	--	--	--	--	--	--
SEP 17...	.000	.000	--	--	--	--	--	--	--	--	--

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT											
04...	--	--	--	--	--	--	--	--	--	--	--
NOV											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
12...	1	2	2	540	180	18	4	30	5	<.1	<.1
JAN											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
13...	--	--	--	--	--	--	--	--	--	--	--
MAR											
12...	0	17	11	330	160	16	5	20	7	<.1	<.1
APR											
09...	1	4	1	510	120	38	11	30	10	.1	.1
MAY											
06...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
08...	4	3	3	360	190	2	1	40	30	.2	.1
AUG											
18...	--	--	--	--	--	--	--	--	--	--	--
SEP											
17...	--	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT											
04...	--	--	--	--	--	--	--	--	5.4	--	--
NOV											
20...	--	--	--	--	0	--	--	--	7.2	--	--
DEC											
12...	2	1	0	0	0	0	20	20	--	--	1.5
JAN											
11...	--	--	--	--	--	--	--	--	5.1	--	--
FEB											
13...	--	--	--	--	0	--	--	--	3.9	--	--
MAR											
12...	7	3	0	0	0	0	90	100	--	8.6	.3
APR											
09...	4	1	0	0	0	0	40	80	--	9.0	.6
MAY											
06...	--	--	--	--	0	--	--	--	6.8	--	--
JUN											
04...	--	--	--	--	--	--	--	--	6.9	--	--
JUL											
08...	0	3	0	0	0	0	40	7	--	12	--
AUG											
18...	--	--	--	--	0	--	--	--	8.9	--	--
SEP											
17...	--	--	--	--	--	--	--	--	7.6	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
04...	1045	375	2	2.0
NOV				
20...	1115	798	1	2.2
DEC				
12...	1030	1270	9	31
JAN				
11...	1015	490	2	2.6
FEB				
13...	1130	340	0	.00
MAR				
12...	1215	469	3	3.8
APR				
09...	1145	2760	4	30
MAY				
06...	0915	835	3	6.8
JUN				
04...	0945	570	2	3.1
JUL				
08...	1015	236	2	1.3
AUG				
18...	1015	480	4	5.2
SEP				
17...	0930	780	3	6.3

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 19,79 0930	AUG 13,79 1300	SEP 12,79 1130	NOV 20,79 1115	MAR 12,80 1215
TOTAL CELLS/ML	1000	480	720	320	890
DIVERSITY: DIVISION	0.9	0.6	1.5	1.0	1.1
.CLASS	0.9	0.6	1.5	1.0	1.1
..ORDER	1.7	0.6	2.0	1.0	1.3
...FAMILY	2.8	0.6	3.0	1.9	1.7
....GENUS	3.2	0.7	3.4	1.9	1.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	45	4	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....MICRACTINIUM	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	55	5	13	3	25	3	--	-	14	2
....CHLORELLA	--	-	--	-	35	5	--	-	--	-
....DICTYOSPHAERIUM	20	2	--	-	--	-	--	-	--	-
....OOCYSTIS	20	2	52	11	--	-	--	-	--	-
....SELENASTRUM	20	2	--	-	--	-	--	-	--	-
....TETRAEDRON	10	1	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	20	2	--	-	--	-	--	-	--	-
....SCENEDESMUS	240#	23	--	-	140#	20	--	-	--	-
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	300#	30	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	14	2
..ZYGNEMATALES										
...DESMIDIACEAE										
....COSMARIUM	*	0	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	20	2	--	-	45	6	--	-	69	8
....MELOSIRA	10	1	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	120	11	--	-	140#	20	77#	24	41	5
....COCCONEIS	*	0	--	-	10	1	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	25	2	--	-	10	1	13	4	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	82	9
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	55	8	--	-	--	-
....SYNEDRA	20	2	--	-	5	1	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	25	2	--	-	15	2	--	-	--	-
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	14	2
...NAVICULACEAE										
....NAVICULA	30	3	--	-	45	6	--	-	55	6
....PINNULARIA	--	-	--	-	--	-	39	12	--	-
...NITZSCHIACEAE										
....NITZSCHIA	35	3	--	-	--	-	39	12	--	-
...TABELLARIACEAE										
....TABELLARIA	--	-	--	-	5	1	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	40	6	--	-	--	-
....COCCOCHLORIS	--	-	--	-	--	-	150#	48	--	-
..HORMOGONALES										
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	410#	86	86	12	--	-	600#	68
....SCHIZOTHRIX	--	-	--	-	60	8	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	MAY 6,80 0915	JUN 4,80 0945	JUL 8,80 1015	AUG 18,80 1015	SEP 17,80 0930
TOTAL CELLS/ML	100	1600	810	77	1200
DIVERSITY: DIVISION	1.1	0.9	0.9	1.3	0.4
.CLASS	1.1	0.9	0.9	1.3	0.4
..ORDER	1.1	1.0	1.1	1.3	0.7
...FAMILY	2.4	1.4	1.5	1.3	0.7
....GENUS	2.4	1.7	1.5	2.3	0.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	620#	76	--	-	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....MICRACTINIUM	--	-	29	2	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	29	2	13	2	26#	33	--	-
....CHLORELLA	--	-	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	1100#	72	--	-	--	-	13	1
....OOCYSTIS	--	-	57	4	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	13#	17	--	-
....TETRAEDRON	--	-	--	-	--	-	13#	17	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	29	2	26	3	--	-	52	4
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	13	2	--	-	13	1
..ZYGNEMATALES										
...DESMIDIACEAE										
....COSMARIUM	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	14	1	26	3	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	29	2	26	3	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	13	13	14	1	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	14	1	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	39#	38	--	-	13	2	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	13	13	--	-	--	-	--	-	13	1
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	13	13	14	1	13	2	13#	17	--	-
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	--	-	--	-
...TABELLARIACEAE										
....TABELLARIA	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	13	13	72	5	52	6	13#	17	39	3
....COCCOCHLORIS	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES										
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	--	-	1000#	89
....OSCILLATORIA	--	-	140	9	--	-	--	-	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	MAY 6,80 0915		JUN 4,80 0945		JUL 8,80 1015		AUG 18,80 1015		SEP 17,80 0930	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	13	13	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	--	-	13	2	--	-	--	-

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
Apr. 9 to May 6	27	2.76	3.39	2.26	.450	Polyethylene strip
May 6 to June 4	29	5.35	3.54	2.08	.180	Polyethylene strip
June 4 to July 8	34	13.1	7.17	8.46	.000	Polyethylene strip
July 8 to Aug. 18	41	1.73	1.26	3.72	1.05	Polyethylene strip

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	5.0	4.0	.0	.0	.0	.0	12.0	20.5	20.0	25.0	22.0
2	17.0	5.5	2.0	.0	.0	.0	.5	12.0	20.5	20.0	25.0	21.5
3	16.0	6.0	1.0	.0	.0	.0	1.0	12.5	21.0	21.0	24.5	21.5
4	16.0	6.0	1.0	.0	.0	.0	1.5	12.5	20.5	21.0	24.0	21.0
5	14.0	6.0	1.0	.0	.0	.0	2.5	12.5	20.5	21.0	24.0	20.0
6	14.0	6.0	.0	.0	.0	.0	4.0	13.0	20.0	20.5	23.0	20.0
7	12.5	4.5	.0	.0	.0	.0	4.5	13.0	20.0	21.0	22.5	19.0
8	10.0	4.0	.0	.0	.0	.0	5.5	14.0	19.0	21.5	23.0	19.0
9	7.0	4.0	.0	.0	.0	.0	7.5	14.0	18.5	22.0	23.0	19.0
10	7.0	4.0	.0	.0	.0	.0	7.0	14.5	19.0	21.5	22.5	19.0
11	7.0	3.5	.0	.0	.0	.0	6.5	14.5	19.0	21.0	22.0	18.5
12	7.0	3.5	.0	.0	.0	.0	6.0	15.0	20.0	20.0	22.0	18.0
13	6.5	2.0	.0	.0	.0	.0	6.5	15.0	19.5	20.0	22.0	18.0
14	6.5	2.0	.0	.0	.0	.0	6.5	15.0	19.0	21.0	22.0	17.5
15	6.0	1.5	.0	.0	.0	.0	7.0	15.5	19.0	21.0	22.0	17.0
16	6.0	1.5	.0	.0	.0	.0	7.0	16.0	18.5	21.5	21.5	17.0
17	6.0	1.5	.0	.0	.0	.0	7.5	16.0	18.5	22.0	21.5	15.0
18	6.0	1.0	.0	.0	.0	.0	7.5	16.0	18.0	23.0	21.5	13.0
19	6.0	1.0	.0	.0	.0	.0	8.0	16.0	18.0	23.5	21.5	12.0
20	6.0	2.0	.0	.0	.0	.0	8.5	17.0	18.0	24.0	21.0	11.5
21	6.5	4.5	.0	.0	.0	.0	8.5	17.0	18.0	24.0	21.0	11.0
22	6.5	6.0	.0	.0	.0	.0	8.0	17.5	19.0	24.0	20.5	11.0
23	7.0	8.0	.0	.0	.0	.0	8.5	17.0	19.0	24.0	20.5	11.0
24	8.0	8.0	.0	.0	.0	.0	9.0	17.5	19.5	24.5	21.0	10.5
25	7.5	8.5	.0	.0	.0	.0	9.0	18.0	20.0	24.5	21.0	10.5
26	7.0	9.0	.0	.0	.0	.0	10.0	18.0	20.0	24.5	21.0	10.5
27	6.0	9.0	.0	.0	.0	.0	10.5	18.5	20.0	24.5	21.5	10.5
28	6.0	6.0	.0	.0	.0	.0	11.0	19.0	20.0	25.0	21.5	10.5
29	5.5	5.0	.0	.0	.0	.0	11.0	19.0	20.0	25.0	22.0	10.5
30	5.0	4.5	.0	.0	---	.0	11.5	20.0	20.0	25.0	22.0	10.5
31	5.0	---	.0	.0	---	.0	---	20.0	---	25.0	22.0	---
MEAN	8.5	4.5	.5	.0	.0	.0	6.5	15.5	19.5	22.5	22.0	15.5

04270000 SALMON RIVER AT CHASM FALLS, NY

LOCATION.--Lat 44°45'22", long 74°13'09", Franklin County, Hydrologic Unit 04150307, on right bank 0.1 mi (0.2 km) downstream from Niagara Mohawk Power Corp. powerplant at Chasm Falls, and 3.0 mi (4.8 km) downstream from Duane Stream.

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--July 1925 to current year.

REVISED RECORDS.--WSP 729: 1931 (m). WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,011.52 ft (308.311 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Seasonal regulation of flow by upstream reservoirs. Diurnal fluctuation at low and medium flow caused by powerplant. A small diversion from tributary stream above station is used as water supply for village of Malone.

AVERAGE DISCHARGE.--55 years, 227 ft^3/s (6.429 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft^3/s (81.8 m^3/s) Apr. 25, 1926, gage height, 5.0 ft (1.52 m); minimum, 9.8 ft^3/s (0.28 m^3/s) Sept. 26, 27, 1963, minimum daily, 28 ft^3/s (0.79 m^3/s) Sept. 4, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 939 ft^3/s (26.6 m^3/s) Nov. 27, gage height, 2.99 ft (0.911 m); minimum, 20 ft^3/s (0.57 m^3/s) Jan. 21, gage height, 0.48 ft (0.146 m); minimum daily, 90 ft^3/s (2.55 m^3/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	116	300	252	123	112	452	195	185	205	106	237
2	114	131	295	233	120	106	430	192	159	159	144	364
3	105	134	246	202	123	109	389	202	153	141	208	480
4	116	134	250	178	123	106	425	202	229	115	259	309
5	112	119	230	181	120	107	631	185	156	114	188	233
6	363	116	234	175	120	107	498	192	141	104	159	192
7	363	112	277	178	114	110	430	202	136	100	139	156
8	281	119	263	178	118	110	498	205	141	114	123	141
9	250	121	215	178	114	110	721	188	139	175	109	139
10	234	197	234	178	115	112	892	192	136	128	107	156
11	207	234	226	172	112	112	728	195	136	112	97	141
12	207	218	295	215	112	107	578	175	123	125	141	130
13	250	193	327	205	110	106	645	168	120	114	150	123
14	277	193	268	192	112	114	553	178	109	100	136	185
15	250	222	238	175	114	109	480	159	118	95	248	240
16	281	226	234	165	114	106	458	172	107	97	181	188
17	268	215	186	162	114	112	394	159	104	93	172	150
18	242	218	180	162	114	175	364	156	112	156	133	185
19	222	226	180	175	114	185	313	202	112	125	123	172
20	207	211	183	175	112	192	252	192	118	107	139	147
21	238	215	177	112	114	198	271	175	125	114	120	150
22	246	207	170	139	110	252	259	159	106	128	110	205
23	211	242	152	156	114	259	244	153	110	130	101	229
24	218	215	211	133	115	248	237	130	95	110	95	198
25	263	167	417	136	115	256	233	141	94	100	94	172
26	226	211	616	133	109	237	296	120	94	91	90	181
27	177	633	463	133	109	219	229	109	93	101	93	198
28	141	440	327	133	110	259	195	109	93	101	125	185
29	136	367	318	130	110	331	185	107	91	95	120	165
30	139	319	318	125	---	404	192	130	130	144	107	150
31	128	---	240	123	---	420	---	229	---	115	195	---
TOTAL	6588	6471	8270	5184	3324	5490	12472	5273	3765	3708	4312	5901
MEAN	213	216	267	167	115	177	416	170	126	120	139	197
MAX	363	633	616	252	123	420	892	229	229	205	259	480
MIN	105	112	152	112	109	106	185	107	91	91	90	123

CAL YR 1979 TOTAL 88613 MEAN 243 MAX 1390 MIN 79
WTR YR 1980 TOTAL 70758 MEAN 193 MAX 892 MIN 90

04270200 LITTLE SALMON RIVER AT BOMBAY, NY

LOCATION.--Lat 44°56'24", long 74°33'24", Franklin County, Hydrologic Unit 04150307, on right bank 50 ft (15 m) downstream from bridge on road to Fort Covington Center, 0.5 mi (0.8 km) east of village of Bombay, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--93.6 mi^2 (242 km^2).

PERIOD OF RECORD.--August to November 1957, July 1958 to current year. Occasional low-flow measurements, water years 1954-55, 1957.

GAGE.--Water-stage recorder. Datum of gage is 173.91 ft (53.008 m) National Geodetic Vertical Datum of 1929. August to November 1957, at site 100 ft (30 m) upstream at datum 0.72 ft (0.219 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--22 years (1958-80), 117 ft^3/s (3.313 m^3/s), 16.98 in/yr (431 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft^3/s (92.0 m^3/s) Apr. 4, 1974, gage height, 12.90 ft (3.932 m); minimum, 8.0 ft^3/s (0.23 m^3/s) Aug. 6, 7, 1965, gage height, 1.52 ft (0.463 m); minimum gage height, 0.85 ft (0.259 m) Sept. 2, 1957, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s (25 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0830	*1,330	37.7	8.60	2.621
Dec. 26	0500	ice jam		*11.83	3.606
Mar. 18	2000	ice jam		11.67	3.557

Minimum discharge, 13.9 ft^3/s (0.39 m^3/s) Sept. 12 and 13, gage height, 1.46 ft (0.445 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	70	139	110	42	46	208	117	34	27	25	28
2	34	65	123	100	41	44	184	106	51	31	32	46
3	36	65	107	90	41	43	166	95	51	29	40	81
4	32	63	110	84	41	40	160	83	49	27	49	51
5	32	59	110	90	40	38	260	73	49	24	32	33
6	84	55	113	98	39	38	250	69	45	21	26	26
7	109	57	152	100	39	40	210	67	38	20	24	22
8	83	70	166	110	39	41	180	71	34	19	25	19
9	96	76	105	110	38	42	300	70	35	30	21	18
10	96	126	109	100	38	45	450	68	37	35	18	20
11	109	145	116	130	39	49	292	67	39	29	17	20
12	113	102	145	170	39	52	232	64	40	44	55	18
13	108	88	171	140	40	54	400	60	37	44	104	16
14	113	97	116	120	40	54	256	57	32	32	50	26
15	95	124	100	110	40	52	238	55	29	25	52	174
16	90	107	76	100	41	47	215	55	28	22	54	93
17	86	95	62	92	42	52	160	55	29	21	41	49
18	76	103	52	90	41	200	134	51	27	21	35	37
19	71	99	47	80	41	740	120	62	26	22	30	33
20	67	89	40	68	41	640	109	76	26	21	52	29
21	79	90	49	58	40	680	109	66	28	23	48	26
22	101	91	62	52	40	700	106	56	28	30	32	27
23	89	148	90	50	40	640	97	52	27	44	25	59
24	89	124	130	48	41	560	92	48	25	37	22	59
25	119	128	180	48	43	520	95	45	23	29	20	39
26	96	147	350	47	44	470	137	42	21	23	18	37
27	80	910	240	46	45	410	131	38	20	20	19	46
28	71	346	180	45	46	370	114	35	19	20	29	45
29	80	234	150	44	47	320	107	33	19	19	37	36
30	93	175	130	43	---	258	115	32	19	39	26	29
31	81	---	120	42	---	241	---	32	---	33	26	---
TOTAL	2541	4148	3840	2615	1188	7526	5627	1900	965	861	1084	1242
MEAN	82.0	138	124	84.4	41.0	243	188	61.3	32.2	27.8	35.0	41.4
MAX	119	910	350	170	47	740	450	117	51	44	104	174
MIN	32	55	40	42	38	38	92	32	19	19	17	16
CFSM	.88	1.47	1.33	.90	.44	2.60	2.01	.66	.34	.30	.37	.44
IN.	1.01	1.65	1.53	1.04	.47	2.99	2.24	.76	.38	.34	.43	.49

CAL YR 1979 TOTAL 41913 MEAN 115 MAX 957 MIN 20 CFSM 1.23 IN 16.66
WTR YR 1980 TOTAL 33537 MEAN 91.6 MAX 910 MIN 16 CFSM .98 IN 13.33

04270510 CHATEAUGAY RIVER BELOW CHATEAUGAY, NY

LOCATION.--Lat 44°57'49", long 74°07'53", Franklin County, Hydrologic Unit 04150307, on left bank 10 ft (3 m) downstream from bridge on Sam Cook Road, 0.2 mi (0.3 km) downstream from Marble River, 2.4 mi (3.9 km) upstream from international boundary, and 4.1 mi (6.6 km) northeast of Chateaugay.

DRAINAGE AREA.--151 mi^2 (391 km^2).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 411.33 ft (125.373 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated at Forge Dam on Upper and Lower Chateaugay Lakes.

AVERAGE DISCHARGE.--14 years (1967-80), 249 ft^3/s (7.052 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft^3/s (147 m^3/s) Apr. 4, 1974, gage height, 7.33 ft (2.234 m), from rating curve extended above 1,600 ft^3/s (45.3 m^3/s); maximum gage height, 10.99 ft (3,350 m) Feb. 11, 1966 (ice jam); minimum discharge, 37 ft^3/s (1.05 m^3/s) Aug. 22, 23, 24, 26, 27, 1979, gage height, 2.56 ft (0.780 m); minimum daily, 37 ft^3/s (1.05 m^3/s) Aug. 23, 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,100 ft^3/s (31.1 m^3/s) Mar. 18, gage height, 6.60 ft (2.01 m), (ice jam); minimum, 64 ft^3/s (1.81 m^3/s) Sept. 30, gage height, 2.74 ft (0.835 m); minimum daily, 66 ft^3/s (1.87 m^3/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	222	320	190	160	160	178	195	99	83	101	128
2	161	219	295	190	160	160	211	208	123	84	102	132
3	159	216	279	190	160	140	230	203	134	83	110	135
4	152	208	216	180	160	130	291	198	134	81	115	127
5	149	185	138	180	160	130	351	203	132	81	111	127
6	299	147	154	190	160	130	338	206	129	88	111	124
7	227	149	166	210	150	120	379	219	127	84	109	122
8	234	175	163	210	150	120	492	219	132	83	109	132
9	241	222	147	220	150	110	639	216	129	81	107	159
10	245	225	145	230	150	120	681	216	129	79	106	176
11	252	211	175	240	150	110	667	214	129	86	106	201
12	248	211	183	250	150	150	695	97	127	81	141	214
13	241	206	161	260	160	190	724	152	125	81	116	214
14	227	206	163	250	160	230	660	127	123	79	118	251
15	227	201	201	240	160	280	632	88	125	79	120	245
16	230	195	168	230	160	380	599	86	127	79	117	226
17	227	198	130	210	160	500	492	84	125	79	114	222
18	225	201	140	200	160	1000	351	90	123	78	111	221
19	222	195	150	190	160	600	256	97	125	78	114	219
20	230	195	170	190	150	450	211	88	125	79	111	218
21	230	185	190	200	150	360	211	86	129	92	108	217
22	230	201	210	220	150	465	185	84	123	90	106	199
23	227	206	225	210	140	283	183	84	103	86	106	158
24	260	203	342	200	130	248	183	84	103	87	102	135
25	256	203	573	190	130	222	190	83	103	82	97	119
26	248	338	356	190	130	198	203	83	101	81	97	97
27	241	486	237	180	140	195	195	83	103	83	103	86
28	241	360	219	180	150	198	190	83	81	82	127	78
29	241	333	210	180	160	195	190	81	79	104	102	66
30	227	329	200	170	---	193	195	83	92	99	104	66
31	225	---	190	170	---	175	---	86	---	96	125	---
TOTAL	6992	6831	6616	6340	4410	7942	11002	4126	3539	2608	3426	4814
MEAN	226	228	213	205	152	256	367	133	118	84.1	111	160
MAX	299	486	573	260	160	1000	724	219	134	104	141	251
MIN	149	147	130	170	130	110	178	81	79	78	97	66

CAL YR 1979 TOTAL 90020 MEAN 247 MAX 1180 MIN 37
WTR YR 1980 TOTAL 68646 MEAN 188 MAX 1000 MIN 66

04273500 SARANAC RIVER AT PLATTSBURGH, NY

LOCATION.--Lat 44°40'54", long 73°28'18", Clinton County, Hydrologic Unit 02010006, on right bank at Plattsburgh, 600 ft (183 m) downstream from Imperial Paper and Color Corp. dam, 3.0 mi (4.8 km) upstream from mouth, and 5.5 mi (8.8 km) downstream from Mead Brook.

DRAINAGE AREA.--608 mi^2 (1,575 km^2). Prior to Nov. 12, 1919, 607 mi^2 (1,572 km^2).

PERIOD OF RECORD.--March 1903 to September 1930, October 1943 to current year. Published as "near Plattsburgh," 1903-30.

REVISED RECORDS.--WSP 345· Drainage area. WSP 384: 1909-10 (monthly discharge only). WSP 1387: 1907-8. WSP 1437: 1908 (minimum daily only).

GAGE.--Water-stage recorder. Datum of gage is 155.74 ft (47.470 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 12, 1919, nonrecording gage and Nov. 12, 1919 to Sept. 30, 1930, water-stage recorder, at site 1.5 mi (2.4 km) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Considerable diurnal fluctuation caused by power and industrial operations. Slight regulation by storage in Upper and Lower Saranac Lakes and elsewhere. During year, city of Plattsburgh diverted an average of 2.52 ft^3/s (0.071 m^3/s) from Saranac River and Mead and West Brooks, tributaries above station, for municipal supply. About 1 ft^3/s (0.028 m^3/s) diverted from Great Chazy River basin into Saranac River for water supply of State Institutions at Dannemora.

AVERAGE DISCHARGE.--64 years, 833 ft^3/s (23.59 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s (326 m^3/s) Apr. 8, 1928, from computation of flow over dam and through waste gates and powerplant; minimum daily, 3.6 ft^3/s (0.102 m^3/s) June 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,530 ft^3/s (72 m^3/s) Dec. 26, gage height, 5.72 ft (1.743 m); minimum gage height, 1.51 ft (0.460 m) Aug. 30; minimum daily discharge, 131 ft^3/s (3.710 m^3/s) June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUI	AUG	SEP
1	516	775	1300	821	402	388	1520	1240	513	463	482	835
2	439	795	1280	907	420	393	1570	1140	468	539	468	1240
3	350	871	1250	749	434	380	1280	1030	453	338	577	1270
4	472	885	1110	681	411	285	1210	930	371	472	960	984
5	588	730	1090	593	420	354	1530	828	482	463	976	815
6	588	842	1090	566	429	346	1470	781	350	327	768	687
7	953	900	1110	561	439	251	1260	821	397	316	384	633
8	775	795	1130	513	429	285	1300	835	295	350	285	571
9	781	736	953	539	420	327	1460	762	443	224	375	588
10	736	828	1070	599	397	346	1840	953	498	523	388	498
11	687	930	1070	593	380	335	1820	900	518	411	523	448
12	768	871	1070	645	388	371	1570	693	472	354	550	545
13	893	775	1060	687	380	350	1980	781	487	371	429	443
14	991	762	945	657	358	338	1880	730	508	448	566	420
15	1040	762	856	711	380	397	1720	610	425	251	717	448
16	999	681	922	663	406	448	1700	633	327	415	550	482
17	976	633	821	651	384	375	1510	633	384	251	487	534
18	930	588	663	663	371	508	1400	663	448	371	523	605
19	907	545	675	622	375	577	1300	736	453	324	458	545
20	878	498	645	622	425	645	1250	849	411	375	230	577
21	878	487	523	582	375	639	1240	808	354	313	195	529
22	878	492	645	477	411	1050	1200	743	513	492	224	582
23	871	550	693	529	384	1310	1140	681	443	523	209	907
24	849	555	736	555	384	1280	1110	705	402	645	212	1020
25	938	599	1420	468	425	1370	1110	588	429	523	302	795
26	976	711	2280	429	477	1250	1400	539	402	610	295	762
27	900	1790	1540	492	350	1240	1480	545	350	588	242	864
28	885	1660	1240	498	346	1300	1310	443	239	555	281	755
29	828	1500	1090	518	434	1490	1250	458	131	605	261	724
30	775	1420	1040	508	---	1850	1340	402	198	622	420	681
31	849	---	871	393	---	1910	---	335	---	513	768	---
TOTAL	24894	24966	32188	18492	11634	22388	43150	22795	12164	13575	14105	20787
MEAN	803	832	1038	597	401	722	1438	735	405	438	455	693
MAX	1040	1790	2280	907	477	1910	1980	1240	518	645	976	1270
MIN	350	487	523	393	346	251	1110	335	131	224	195	420

CAL YR 1979 TOTAL 343208.7 MEAN 940 MAX 4960 MIN 3.6
WTR YR 1980 TOTAL 261138.0 MEAN 713 MAX 2280 MIN 131

04273900 LAKE PLACID AT LAKE PLACID, NY

LOCATION.--Lat 44°17'42", long 73°59'26", Essex County, Hydrologic Unit 02010004, on south shore of East Lake on Victor Herbert Drive, and 400 ft (122 m) north of State Highway 86 in village of Lake Placid.

DRAINAGE AREA.--20.1 mi^2 (52.1 km^2) at outlet 0.7 mi (1.1 km) northwest of gage.

PERIOD OF RECORD.--November 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,859.42 ft (566.751 m) May 3, 1972; minimum, 1,857.60 ft (566.196 m) Oct. 2, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,858.69 ft (566.529 m) Nov. 28, minimum, 1,857.91 ft (566.291 m) Mar. 5 and 6.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1858.14	1858.24	1858.48	1858.26	1858.07	1857.95	1858.27	1858.40	1858.18	1858.26	1858.32	1858.32
2	1858.13	1858.25	1858.45	1858.24	1858.07	1857.94	1858.29	1858.40	1858.19	1858.29	1858.36	1858.36
3	1858.12	1858.27	1858.40	1858.23	1858.07	1857.93	1858.30	1858.39	1858.19	1858.29	1858.36	1858.39
4	1858.11	1858.28	1858.37	1858.22	1858.06	1857.93	1858.32	1858.37	1858.21	1858.27	1858.36	1858.38
5	1858.11	1858.27	1858.35	1858.20	1858.05	1857.93	1858.37	1858.35	1858.22	1858.25	1858.34	1858.35
6	1858.20	1858.26	1858.32	1858.19	1858.04	1857.93	1858.36	1858.34	1858.20	1858.23	1858.33	1858.32
7	1858.21	1858.25	1858.32	1858.19	1858.03	1857.94	1858.34	1858.33	1858.21	1858.19	1858.32	1858.30
8	1858.21	1858.24	1858.31	1858.18	1858.03	1857.94	1858.35	1858.33	1858.21	1858.22	1858.30	1858.27
9	1858.22	1858.24	1858.29	1858.17	1858.02	1857.96	1858.40	1858.33	1858.19	1858.26	1858.27	1858.24
10	1858.22	1858.26	1858.29	1858.17	1858.01	1857.95	1858.49	1858.32	1858.20	1858.24	1858.25	1858.23
11	1858.21	1858.26	1858.26	1858.18	1858.00	1857.95	1858.53	1858.30	1858.20	1858.23	1858.24	1858.19
12	1858.20	1858.25	1858.27	1858.21	1858.00	1857.95	1858.51	1858.30	1858.20	1858.20	1858.27	1858.16
13	1858.19	1858.24	1858.28	1858.21	1858.00	1857.94	1858.55	1858.29	1858.19	1858.17	1858.28	1858.14
14	1858.20	1858.23	1858.27	1858.20	1857.99	1857.98	1858.53	1858.29	1858.18	1858.16	1858.27	1858.18
15	1858.21	1858.23	1858.26	1858.19	1857.99	1858.02	1858.54	1858.28	1858.18	1858.14	1858.27	1858.19
16	1858.24	1858.22	1858.24	1858.18	1858.00	1858.00	1858.53	1858.28	1858.19	1858.20	1858.25	1858.18
17	1858.24	1858.20	1858.24	1858.17	1858.00	1858.00	1858.49	1858.27	1858.17	1858.21	1858.24	1858.17
18	1858.24	1858.20	1858.23	1858.16	1857.99	1858.03	1858.44	1858.27	1858.16	1858.21	1858.23	1858.22
19	1858.25	1858.19	1858.21	1858.16	1857.98	1858.06	1858.41	1858.31	1858.15	1858.21	1858.23	1858.22
20	1858.26	1858.18	1858.20	1858.16	1857.97	1858.05	1858.38	1858.33	1858.15	1858.20	1858.24	1858.22
21	1858.29	1858.18	1858.20	1858.15	1857.97	1858.06	1858.37	1858.31	1858.16	1858.23	1858.23	1858.23
22	1858.29	1858.20	1858.18	1858.14	1857.97	1858.14	1858.35	1858.30	1858.17	1858.30	1858.21	1858.25
23	1858.29	1858.22	1858.19	1858.14	1857.97	1858.14	1858.34	1858.29	1858.16	1858.36	1858.21	1858.28
24	1858.33	1858.23	1858.20	1858.13	1857.97	1858.15	1858.32	1858.28	1858.16	1858.37	1858.20	1858.27
25	1858.34	1858.26	1858.28	1858.12	1857.97	1858.16	1858.32	1858.27	1858.15	1858.34	1858.18	1858.25
26	1858.33	1858.36	1858.32	1858.11	1857.96	1858.17	1858.37	1858.23	1858.14	1858.32	1858.18	1858.28
27	1858.31	1858.63	1858.32	1858.10	1857.96	1858.17	1858.38	1858.22	1858.14	1858.33	1858.21	1858.32
28	1858.29	1858.65	1858.31	1858.10	1857.96	1858.17	1858.40	1858.20	1858.13	1858.31	1858.30	1858.31
29	1858.28	1858.60	1858.30	1858.10	1857.96	1858.19	1858.41	1858.18	1858.12	1858.31	1858.29	1858.30
30	1858.27	1858.54	1858.29	1858.09	---	1858.23	1858.41	1858.17	1858.16	1858.33	1858.28	1858.28
31	1858.26	---	1858.27	1858.08	---	1858.26	---	1858.16	---	1858.31	1858.29	---
TOTAL	57605.19	55748.63	57606.90	57603.13	53882.06	57599.22	55752.07	57607.09	55745.26	57605.94	57606.31	55747.80
MEAN	1858.23	1858.29	1858.29	1858.17	1858.00	1858.04	1858.40	1858.29	1858.18	1858.26	1858.27	1858.26
MAX	1858.34	1858.65	1858.48	1858.26	1858.07	1858.26	1858.55	1858.40	1858.22	1858.37	1858.36	1858.39
MIN	1858.11	1858.18	1858.18	1858.08	1857.96	1857.93	1858.27	1858.16	1858.12	1858.14	1858.18	1858.14

CAL YR 1979 TOTAL 678266.45 MEAN 1858.26 MAX 1859.10 MIN 1857.97
WTR YR 1980 TOTAL 680109.60 MEAN 1858.22 MAX 1858.65 MIN 1857.93

04275000 EAST BRANCH AUSABLE RIVER AT AU SABLE FORKS, NY

LOCATION.--Lat 44°26'20", long 73°40'55", Essex County, Hydrologic Unit 02010004, on left bank 700 ft (213 m) upstream from bridge on Burt Street in Au Sable Forks, and 0.5 mi (0.8 km) upstream from confluence with West Branch.

DRAINAGE AREA.--198 mi^2 (513 km^2).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 545.37 ft (166.229 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 21, 1938, nonrecording gage at lower highway bridge in Au Sable Forks, 400 ft (122 m) upstream from confluence with West Branch at datum 3.54 ft (1.079 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation of storage in Upper and Lower Ausable Lakes and occasional small diurnal fluctuation, cause unknown.

AVERAGE DISCHARGE.--56 years, 309 ft^3/s (8.751 m^3/s), 21.20 in/yr (538 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft^3/s (569 m^3/s) Sept. 22, 1938, gage height, 12.91 ft (3.935 m), from rating curve extended above 5,800 ft^3/s (164 m^3/s) on basis of velocity-area studies; minimum observed, 20 ft^3/s (0.57 m^3/s) Aug. 11, 14, 28, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,700 ft^3/s (105 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	0300[a]	*15,200	430	11.13	3.392	Apr. 10	0300	5,550	157	7.09	2.161
Mar. 21	2100	ice jam		7.63	2.326						

[a] About.

Minimum recorded discharge, 46 ft^3/s (1.303 m^3/s) Aug. 26, gage height 1.08 ft (0.329 m) but was estimated as less for several days in February and March during periods of ice effect.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	160	445	170	64	38	361	856	170	568	157	277
2	75	160	370	150	60	34	382	907	224	333	170	233
3	72	280	310	140	54	40	321	787	317	227	131	295
4	70	333	299	130	45	48	378	654	494	167	129	192
5	73	266	263	120	41	64	728	460	479	127	110	140
6	1570	230	260	120	44	58	357	418	317	119	114	114
7	801	209	266	120	47	54	306	489	240	129	119	97
8	465	206	246	120	52	52	499	536	224	148	99	83
9	333	192	178	120	56	52	1940	418	206	353	86	73
10	277	530	221	120	60	56	3750	382	190	246	79	71
11	240	590	215	170	72	60	1580	321	189	178	66	66
12	224	391	237	300	86	58	821	313	173	136	81	58
13	299	306	280	220	80	47	1420	302	152	114	112	52
14	349	260	215	190	74	43	728	317	134	99	93	66
15	284	230	209	170	68	44	1480	291	123	86	138	194
16	291	206	209	150	66	50	967	260	155	108	140	157
17	256	183	167	140	70	58	499	240	150	110	116	125
18	277	181	110	120	68	90	391	317	127	95	99	233
19	337	170	94	110	68	170	310	1290	112	86	86	221
20	337	165	110	100	74	280	313	748	110	71	88	165
21	374	170	120	96	84	260	536	484	173	77	77	178
22	302	173	150	90	76	400	409	370	218	162	66	192
23	253	192	210	88	72	450	310	299	165	395	60	186
24	329	206	300	82	68	370	284	263	150	253	55	157
25	382	243	500	80	66	387	504	237	121	175	50	127
26	291	2320	735	76	60	295	1370	206	101	134	49	134
27	240	6600	418	74	56	246	878	181	92	197	49	361
28	212	1610	284	74	52	277	672	157	83	250	104	277
29	197	885	263	72	50	387	1160	143	75	186	106	206
30	181	590	221	72	---	536	1290	131	92	263	79	165
31	167	---	183	70	---	441	---	127	---	230	391	---
TOTAL	9635	18237	8088	3854	1833	5445	24944	12904	5556	5822	3299	4895
MEAN	311	608	261	124	63.2	176	831	416	185	188	106	163
MAX	1570	6600	735	300	86	536	3750	1290	494	568	391	361
MIN	70	160	94	70	41	34	284	127	75	71	49	52
CFSM	1.57	3.07	1.32	.63	.32	.89	4.20	2.10	.93	.95	.54	.82
IN.	1.81	3.43	1.52	.72	.34	1.02	4.69	2.42	1.04	1.09	.62	.92

CAL YR 1979 TOTAL 153387 MEAN 420 MAX 6600 MIN 36 CFSM 2.12 IN 28.82
WTR YR 1980 TOTAL 104512 MEAN 286 MAX 6600 MIN 34 CFSM 1.44 IN 19.64

04278000 LAKE GEORGE AT ROGERS ROCK, NY

LOCATION.--Lat 43°48'28", long 73°27'30", Essex County, Hydrologic Unit 02010001, on west shore about 500 ft (152 m) north of Hooper's dock at Rogers Rock, and 0.4 mi (0.6 km) west of Baldwin.

DRAINAGE AREA.--233 mi² (603 km²) at outlet at Ticonderoga.

PERIOD OF RECORD.--July 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 315.93 ft (96.295 m) National Geodetic Vertical Datum, adjustment of 1912. Prior to Nov. 4, 1929, nonrecording gages at several sites within a half mile of present site at same datum. Nov. 4, 1929 to Sept. 26, 1936, nonrecording gage at present site and datum.

REMARKS.--Elevation of lake regulated by floodgates at Ticonderoga. Prior to October 1974, lake was regulated by powerplant wheel gate and floodgates. Lake George has been controlled by a dam at its outlet for more than 100 years. Area of water surface is 44 mi² (114 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 5.09 ft (1.551 m) Apr. 9, 1936; minimum, 0.64 ft (0.195 m) Dec. 20, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.00 ft (1.219 m) Apr. 15 and 18; minimum, 3.16 ft (0.963 m) Feb. 7, 10, 15.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.35	3.49	3.73	3.52	3.23	---	3.83	3.76	3.77	3.61	3.62	3.46
2	3.35	3.49	3.66	3.51	3.24	---	3.82	3.77	3.78	3.63	3.62	3.50
3	3.34	3.54	3.66	3.50	3.22	---	3.79	3.77	3.84	3.61	3.63	3.54
4	3.39	3.59	3.60	3.51	3.21	---	3.81	3.76	3.90	3.61	3.60	3.53
5	3.40	3.59	3.56	3.43	3.21	---	3.84	3.71	3.84	3.61	3.59	3.56
6	3.57	3.61	3.49	3.48	3.21	---	3.81	3.71	3.83	3.57	3.67	3.52
7	3.50	3.61	3.44	3.56	3.20	---	3.81	3.74	3.77	3.57	3.66	3.48
8	3.48	3.63	3.46	3.54	3.20	---	3.78	3.76	3.77	3.59	3.66	3.46
9	3.45	3.61	3.45	3.51	3.21	3.35	3.78	3.75	3.73	3.60	3.65	3.48
10	3.45	3.67	3.41	3.50	3.20	3.36	3.84	3.74	3.66	3.61	3.61	3.44
11	3.46	3.66	3.42	3.59	3.20	3.38	3.90	3.73	3.60	3.64	3.59	3.45
12	3.46	3.67	3.42	3.67	3.21	3.40	3.89	3.70	3.56	3.60	3.61	3.33
13	3.53	3.67	3.37	3.60	3.20	3.36	3.90	3.69	3.59	3.57	3.57	3.33
14	3.49	3.67	3.42	3.57	3.21	3.46	3.86	3.68	3.58	3.60	3.58	3.38
15	3.51	3.68	3.44	3.51	3.20	3.50	3.95	3.67	3.56	3.59	3.57	3.32
16	3.47	3.65	3.44	3.51	3.21	3.48	3.96	3.66	3.56	3.57	3.50	3.38
17	3.50	3.63	3.41	3.54	3.25	3.49	3.96	3.65	3.61	3.57	3.49	3.39
18	3.44	3.55	3.37	3.51	3.26	3.58	3.95	3.73	3.60	3.55	3.50	3.31
19	3.49	3.55	3.35	3.48	3.25	3.59	3.89	3.71	3.59	3.56	3.49	3.33
20	3.50	3.57	3.37	3.44	3.25	3.58	3.88	3.71	3.61	3.58	3.44	3.37
21	3.50	3.52	3.39	3.40	3.24	3.59	3.82	3.75	3.63	3.60	3.43	3.31
22	3.49	3.55	3.37	3.36	3.24	3.76	3.76	3.77	3.63	3.67	3.42	3.34
23	3.52	3.51	3.39	3.37	3.27	3.78	3.70	3.74	3.63	3.67	3.40	3.31
24	3.51	3.50	3.38	3.35	3.29	3.79	3.70	3.74	3.63	3.65	3.39	3.27
25	3.52	3.47	3.41	3.33	3.28	3.80	3.67	3.69	3.63	3.65	3.40	3.29
26	3.50	3.58	3.48	3.32	3.27	3.82	3.67	3.72	3.63	3.63	3.40	3.38
27	3.48	3.85	3.53	3.28	3.29	3.81	3.66	3.73	3.60	3.62	3.40	3.34
28	3.48	3.86	3.54	3.28	3.30	3.81	3.65	3.71	3.58	3.65	3.31	3.30
29	3.47	3.84	3.55	3.25	3.31	3.80	3.71	3.72	3.59	3.61	3.34	3.28
30	3.46	3.81	3.54	3.24	---	3.84	3.76	3.74	3.61	3.63	3.37	3.28
31	3.47	---	3.52	3.22	---	3.83	---	3.77	---	3.63	3.44	---
MEAN	3.47	3.62	3.47	3.45	3.24	---	3.81	3.73	3.66	3.61	3.51	3.39
MAX	3.57	3.86	3.73	3.67	3.31	---	3.96	3.77	3.90	3.67	3.67	3.56
MIN	3.34	3.47	3.35	3.22	3.20	---	3.65	3.65	3.56	3.55	3.31	3.27

CAL YR 1979 MEAN 3.56 MAX 4.10 MIN 2.76

04278300 NORTHWEST BAY BROOK NEAR BOLTON LANDING, NY

LOCATION.--Lat 43°39'48", long 73°36'14", Warren County, Hydrologic Unit 02010001, on left bank 10 ft (3 m) downstream from county bridge on Padanarum Road, 7.7 mi (12.4 km) north of Bolton Landing.

DRAINAGE AREA.--23.4 mi^2 (61.6 km^2).

PERIOD OF RECORD.--October 1965 to September 1968, October 1971 to current year. Annual maximum, water years 1969-71.

GAGE.--Water-stage recorder. Datum of gage is 423.60 ft (129.113 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--12 years (1966-68, 1972-80), 37.6 ft^3/s (1.065 m^3/s), 21.82 in/yr (554 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft^3/s (46.7 m^3/s) Dec. 21, 1973, gage height, 6.15 ft (1.875 m) from rating curve extended above 190 ft^3/s (5.38 m^3/s) on basis of slope-area measurement at gage height 5.53 ft (1.686 m); maximum gage height, 7.13 ft (2.173 m) Jan. 2, 1979 (ice jam); minimum discharge recorded, 0.28 ft^3/s (0.008 m^3/s) Sept. 27, 28, 29, 1968, gage height, 1.18 ft (0.360 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 26	2215	769	21.8	4.42	1.347	Apr. 15	0915	442	12.5	3.50	1.067
Mar. 21	1810	*867	24.6	*4.66	1.420						

Minimum discharge, 0.51 ft^3/s (0.014 m^3/s) Sept. 13, 24; minimum gage height, 0.69 ft (0.210 m) Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	13	53	20	11	5.0	62	56	10	4.3	2.9	1.2
2	8.0	15	46	17	10	5.2	57	50	11	3.9	2.4	2.4
3	8.0	76	40	15	9.8	5.2	54	45	22	3.7	2.6	3.7
4	9.3	60	37	13	9.6	5.4	88	40	32	2.9	3.5	2.1
5	8.7	42	35	12	9.2	5.6	95	35	18	2.8	2.8	1.6
6	37	34	33	11	9.0	6.0	64	34	13	2.8	6.3	1.6
7	25	30	32	11	8.6	6.2	55	42	12	2.1	5.5	1.1
8	18	28	29	11	8.2	7.4	52	41	12	3.1	3.1	1.0
9	16	26	25	12	7.8	17	85	35	10	5.0	2.6	.82
10	17	69	24	13	7.6	7.2	156	31	9.0	3.3	2.0	.82
11	16	56	23	19	7.4	6.0	126	29	8.0	2.9	1.7	.66
12	16	44	24	90	7.2	5.2	87	27	7.4	2.4	1.8	.66
13	31	37	23	70	7.0	4.9	79	27	6.9	2.1	1.7	.58
14	28	35	21	62	6.8	4.8	68	28	6.3	1.8	1.4	1.4
15	21	35	19	50	6.6	4.7	252	24	6.0	1.7	2.3	1.3
16	21	30	18	42	6.4	5.2	146	21	11	1.7	1.6	1.0
17	19	27	16	37	6.2	7.0	97	19	7.4	1.6	1.3	.91
18	18	26	14	34	6.0	187	76	24	6.0	1.4	1.2	1.4
19	17	24	14	30	6.4	162	64	27	5.3	1.2	1.2	1.2
20	16	23	16	29	7.0	130	57	22	6.9	1.6	1.2	.91
21	16	22	18	52	6.6	370	52	18	9.0	2.6	1.2	.82
22	15	21	19	65	6.2	217	47	17	6.6	4.3	1.1	.74
23	13	21	19	28	6.0	119	43	15	5.5	4.8	1.0	.66
24	17	20	22	18	5.8	109	40	13	4.8	7.7	.91	.51
25	17	24	65	17	5.6	109	39	12	4.3	3.7	.91	.66
26	16	183	58	16	5.4	85	44	10	3.7	2.8	.91	2.0
27	15	281	42	15	5.2	76	40	9.3	3.5	2.4	1.0	1.4
28	14	121	33	14	5.0	76	47	8.4	3.1	2.3	.91	1.0
29	14	82	28	13	5.0	95	97	7.7	2.9	2.6	.82	.82
30	14	63	26	12	---	130	70	7.1	3.7	4.3	.91	.91
31	13	---	23	12	---	80	---	6.9	---	4.3	1.4	---
TOTAL	522.4	1568	895	860	208.6	2053.0	2339	781.4	267.3	94.1	60.17	35.88
MEAN	16.9	52.3	28.9	27.7	7.19	66.2	78.0	25.2	8.91	3.04	1.94	1.20
MAX	37	281	65	90	11	370	252	56	32	7.7	6.3	3.7
MIN	8.0	13	14	11	5.0	4.7	39	6.9	2.9	1.2	.82	.51
CFSM	.72	2.24	1.24	1.18	.31	2.83	3.33	1.08	.38	.13	.08	.05
IN.	.83	2.49	1.42	1.37	.33	3.26	3.72	1.24	.42	.15	.10	.06

CAL YR 1979 TOTAL 16310.80 MEAN 44.7 MAX 1300 MIN 3.2 CFSM 1.91 IN 25.93
WTR YR 1980 TOTAL 9684.85 MEAN 26.5 MAX 370 MIN .51 CFSM 1.13 IN 15.40

04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, Hydrologic Unit 02010001, on right bank 0.3 mi (0.5 km) downstream from Carver Falls, 1.9 mi (3.1 km) upstream from Hubbardton River, and 3.2 mi (5.1 km) northwest of Fair Haven.

DRAINAGE AREA.--187 mi^2 (484 km^2).

PERIOD OF RECORD.--Discharge: October 1928 to current year.
Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Altitude of gage is 105 ft (32 m), from topographic map.

REMARKS.--Records fair except those for winter period and period of no gage-height record, Nov. 3 to Dec. 11, Dec. 13 to Feb. 20, which are poor. Flow regulated by powerplant upstream and by Lake Bomoseen. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--52 years, 249 ft^3/s (7.052 m^3/s), 18.08 in/yr (459 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft^3/s (419 m^3/s) July 20, 1945, gage height, 24.36 ft (7.425 m), from high-water mark in well, from rating curve extended above 2,600 ft^3/s (74 m^3/s) on basis of computations of flow over dam at gage heights 16.10 ft (4.907 m), 21.40 ft (6.523 m), and 24.36 ft (7.425 m); minimum daily, 2.1 ft^3/s (0.059 m^3/s) Aug. 8, 1965, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft^3/s (74 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 18	1700	*3940	112	*13.83	4.215						

Minimum daily discharge, 6.0 ft^3/s (0.17 m^3/s) July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	166	140	58	32	26	700	215	79	38	23	112
2	59	165	125	56	31	26	640	217	72	32	45	81
3	54	280	115	52	30	26	600	207	113	29	95	146
4	90	260	110	43	29	27	669	182	463	6.9	110	126
5	95	170	105	45	28	30	957	161	349	12	45	103
6	139	130	100	41	28	40	784	143	252	18	90	81
7	155	115	140	38	27	35	682	393	114	46	140	56
8	124	105	120	43	27	100	642	486	131	29	160	78
9	111	100	96	41	26	430	629	422	137	34	155	54
10	124	270	88	38	26	400	796	394	108	35	160	51
11	121	280	74	50	25	430	969	364	82	28	70	42
12	113	180	78	82	25	300	809	335	70	6.7	32	49
13	182	150	82	70	25	150	793	229	69	44	42	30
14	176	130	72	54	26	120	715	253	38	6.9	13	41
15	151	120	64	51	26	105	813	192	55	34	60	50
16	130	110	84	48	26	110	858	166	100	26	31	47
17	122	105	100	45	26	110	738	138	66	6.4	68	30
18	113	100	64	43	26	2500	654	128	46	41	45	50
19	104	96	50	42	27	1800	576	156	50	6.7	41	72
20	97	94	52	40	30	900	457	158	46	6.0	47	31
21	85	90	56	38	28	1000	427	128	25	20	43	21
22	87	88	60	34	26	1900	389	121	45	50	50	67
23	80	84	64	42	26	1400	358	104	64	84	17	16
24	85	82	100	37	26	940	331	102	49	58	50	53
25	137	120	160	34	26	800	313	79	40	120	35	16
26	184	350	130	37	25	680	280	96	37	210	15	123
27	188	680	100	38	25	560	221	82	33	27	34	181
28	182	400	82	37	25	500	226	64	6.7	35	33	95
29	180	220	72	36	25	600	231	57	16	17	31	83
30	174	160	66	35	---	1050	227	62	50	12	13	58
31	168	---	62	33	---	900	---	49	---	14	50	---
TOTAL	3864	5400	2811	1381	778	17995	17484	5883	2805.7	1132.6	1843	2043
MEAN	125	180	90.7	44.5	26.8	580	583	190	93.5	36.5	59.5	68.1
MAX	188	680	160	82	32	2500	969	486	463	210	160	181
MIN	54	82	50	33	25	26	221	49	6.7	6.0	13	16
CFSM	.67	.96	.49	.24	.14	3.10	3.12	1.02	.50	.20	.32	.36
IN.	.77	1.07	.56	.27	.15	3.58	3.48	1.17	.56	.23	.37	.41

CAL YR 1979 TOTAL 114917.1 MEAN 315 MAX 3000 MIN 6.6 CFSM 1.68 IN 22.86
WTR YR 1980 TOTAL 63420.3 MEAN 173 MAX 2500 MIN 6.0 CFSM .93 IN 12.62

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft (15 m) south of Gulf Oil Co. dock at Burlington, 0.1 mi (0.2 km) north of Burlington Water Department pumping station, and 0.5 mi (0.8 km) north of railroad station.

PERIOD OF RECORD.--Gage heights: May 1907 to current year.
Water-quality records: Water year 1971.

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft (28.304 m) National Geodetic Vertical Datum of 1929. Prior to July 20, 1937, nonrecording gage at site 0.7 mi (1.1 km) south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mi (0.2 km) south, both at present datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.80 ft (2.682 m) Apr. 4, 1976; minimum observed, -0.25 ft (-0.076 m) Dec. 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.49 ft (1.369 m) Apr. 19, affected by seiche; minimum, 1.24 ft (0.378 m) Mar. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.53	2.32	3.23	3.16	2.28	1.44	3.05	4.29	2.98	2.16	2.06	1.95
2	2.53	2.31	3.28	3.12	2.25	1.41	3.08	4.26	2.95	2.16	2.07	2.03
3	2.50	2.41	3.21	3.11	2.21	1.39	3.14	4.23	2.93	2.16	2.10	2.08
4	2.47	2.45	3.19	3.05	2.17	1.36	3.18	4.18	2.91	2.14	2.10	2.12
5	2.45	2.49	3.13	3.01	2.14	1.34	3.28	4.13	2.91	2.11	2.12	2.07
6	2.46	2.48	3.10	2.97	2.10	1.33	3.38	4.07	2.91	2.09	2.13	2.06
7	2.45	2.50	3.14	2.84	2.07	1.31	3.39	4.06	2.89	2.06	2.14	2.09
8	2.44	2.48	3.09	2.85	2.04	1.31	3.37	4.05	2.86	2.04	2.15	2.07
9	2.48	2.48	3.05	2.82	2.00	1.31	3.45	4.04	2.82	2.04	2.13	2.00
10	2.48	2.49	3.02	2.78	1.97	1.28	3.57	4.01	2.80	2.01	2.12	1.96
11	2.42	2.53	2.96	2.67	1.92	1.30	3.77	3.96	2.76	2.00	2.09	1.92
12	2.39	2.54	2.96	2.73	1.90	1.30	3.91	3.94	2.73	1.97	2.08	1.90
13	2.38	2.54	2.98	2.72	1.86	1.29	4.02	3.91	2.68	1.97	2.09	1.91
14	2.40	2.55	2.96	2.69	1.83	1.34	4.16	3.86	2.64	1.95	2.09	1.92
15	2.40	2.51	2.89	2.76	1.81	1.35	4.26	3.82	2.63	1.91	2.07	1.92
16	2.42	2.49	2.78	2.77	1.79	1.32	4.39	3.76	2.58	1.90	2.06	1.93
17	2.41	2.45	2.83	2.73	1.77	1.28	4.46	3.72	2.55	1.90	2.08	1.81
18	2.42	2.46	2.80	2.71	1.72	1.40	4.47	3.62	2.52	1.90	2.05	1.88
19	2.38	2.45	2.77	2.72	1.67	1.63	4.48	3.61	2.51	1.87	2.01	1.91
20	2.34	2.40	2.72	2.70	1.66	1.77	4.43	3.62	2.46	1.85	2.03	1.90
21	2.38	2.42	2.64	2.66	1.64	1.88	4.44	3.58	2.45	1.87	2.04	1.91
22	2.41	2.35	2.63	2.61	1.61	2.04	4.45	3.54	2.39	1.90	2.00	1.95
23	2.41	2.37	2.61	2.59	1.60	2.18	4.44	3.52	2.37	1.94	1.99	1.98
24	2.43	2.37	2.62	2.57	1.58	2.30	4.39	3.46	2.34	1.95	1.97	2.00
25	2.42	2.41	2.73	2.54	1.55	2.42	4.35	3.41	2.32	1.96	1.94	1.96
26	2.44	2.44	2.94	2.50	1.53	2.54	4.33	3.33	2.29	1.96	1.92	1.95
27	2.44	2.74	3.11	2.46	1.49	2.61	4.32	3.27	2.26	1.99	1.91	1.96
28	2.41	3.01	3.18	2.43	1.49	2.66	4.29	3.21	2.22	1.97	1.95	1.98
29	2.42	3.14	3.20	2.39	1.47	2.74	4.30	3.15	2.18	1.95	1.94	1.96
30	2.41	3.22	3.21	2.36	---	2.87	4.30	3.08	2.17	2.02	1.91	1.90
31	2.40	---	3.19	2.31	---	2.97	---	3.00	---	2.07	1.89	---
MEAN	2.43	2.53	2.97	2.72	1.83	1.76	3.96	3.73	2.60	1.99	2.04	1.97
MAX	2.53	3.22	3.28	3.16	2.28	2.97	4.48	4.29	2.98	2.16	2.15	2.12
MIN	2.34	2.31	2.61	2.31	1.47	1.28	3.05	3.00	2.17	1.85	1.89	1.81

CAL YR 1979 MEAN 3.50 MAX 7.00 MIN 1.17
WTR YR 1980 MEAN 2.55 MAX 4.48 MIN 1.28

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi (1.6 km) south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi² (21,437 km²).

WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1863 to December 1870 (maximum and minimum monthly gage heights at St. Johns, Quebec, published in WSP 97) and March 1871 to current year (daily gage heights prior to October 1970, elevations thereafter: those for 1871-1907 published in WSP 894). Gage heights prior to Oct. 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point." Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. March 1871 to May 1923, nonrecording gage located in Fort Montgomery and May 1923 to October 1938, nonrecording gage at present site. Prior to October 1970, at datum 93.00 ft (28.346 m) higher.

REMARKS.--Area of lake surface about 490 mi² (1,269 km²). Total volume below 92.5 ft (28.19 m) elevation, reported by Lake Champlain Studies Center, 902.2 bil ft³ (25,600 hm³).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.80 ft (31.029 m) Mar. 30, 1903; minimum observed, 92.17 ft (28.093 m) Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft (31.12 m) May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 97.55 ft (29.73 m) Apr. 20, minimum, 94.06 ft (28.67 m) Mar. 11 and 12.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.44	95.50	96.09	96.00	95.11	94.28	95.88	97.11	95.86	95.04	94.97	94.89
2	95.36	95.27	96.03	95.93	95.07	94.26	95.96	97.10	95.82	95.05	94.96	94.94
3	95.36	95.24	96.21	95.88	95.04	94.25	95.97	97.06	95.78	95.04	95.00	94.91
4	95.34	95.31	96.11	95.90	95.00	94.22	96.04	96.95	95.72	95.01	94.99	94.95
5	95.37	95.35	96.31	95.78	94.98	94.21	96.13	96.94	95.74	95.04	95.00	95.17
6	95.47	95.42	96.11	95.80	94.94	94.18	96.19	96.91	95.80	94.80	95.08	94.97
7	95.42	95.34	96.03	96.02	94.90	94.16	96.35	96.95	95.80	94.89	95.04	94.90
8	95.27	95.49	95.94	95.73	94.88	94.14	96.38	96.90	95.76	94.99	95.03	94.82
9	95.25	95.31	96.05	95.65	94.84	94.17	96.34	96.92	95.70	94.88	94.94	95.01
10	95.29	95.40	95.81	95.66	94.80	94.17	96.42	96.89	95.66	94.90	94.94	94.87
11	95.40	95.35	96.03	95.93	94.78	94.15	96.64	96.96	95.62	94.86	94.95	94.85
12	95.41	95.35	95.78	95.57	94.74	94.13	96.80	96.77	95.60	94.79	94.97	94.73
13	95.33	95.36	95.73	95.72	94.71	94.14	96.88	96.76	95.62	94.77	94.93	94.74
14	95.22	95.32	95.76	95.69	94.68	94.16	97.06	96.71	95.54	94.81	94.99	94.78
15	95.27	95.43	96.03	95.52	94.64	94.16	97.14	96.69	95.43	94.86	94.97	94.73
16	95.24	95.27	95.95	95.55	94.61	94.17	97.18	96.62	95.41	94.77	94.83	94.95
17	95.28	95.37	95.48	95.63	94.60	94.19	97.28	96.57	95.42	94.75	94.86	95.13
18	95.23	95.26	95.59	95.62	94.59	94.24	97.34	96.76	95.39	94.75	94.92	94.72
19	95.42	95.27	95.58	95.54	94.55	94.47	97.32	96.43	95.34	94.79	94.97	94.79
20	95.39	95.35	95.57	95.48	94.50	94.63	97.34	96.46	95.40	94.75	94.92	94.94
21	95.33	95.23	95.63	95.46	94.45	94.74	97.24	96.49	95.28	94.72	94.90	94.78
22	95.30	95.39	95.53	95.52	94.47	94.84	97.20	96.41	95.28	94.78	94.88	94.81
23	95.35	95.31	95.49	95.45	94.44	95.02	97.18	96.35	95.26	94.81	94.84	94.76
24	95.27	95.30	95.45	95.39	94.44	95.14	97.21	96.31	95.24	94.81	94.82	94.80
25	95.27	95.23	95.52	95.38	94.39	95.26	97.19	96.15	95.21	94.86	94.82	95.01
26	95.28	95.36	95.75	95.33	94.35	95.37	97.17	96.14	95.19	94.83	94.82	94.89
27	95.27	95.66	95.89	95.30	94.37	95.45	97.15	96.07	95.07	94.84	94.78	94.83
28	95.39	95.99	95.97	95.27	94.32	95.51	97.16	96.04	95.08	94.95	94.74	94.77
29	95.23	96.01	96.00	95.22	94.30	95.58	97.13	96.00	95.10	94.97	94.74	94.94
30	95.24	96.08	95.96	95.19	---	95.67	97.14	96.02	95.04	94.94	94.83	94.93
31	95.25	---	96.03	95.14	---	95.79	---	96.02	---	94.94	94.86	---
MEAN	95.32	95.42	95.85	95.59	94.67	94.61	96.81	96.60	95.47	94.87	94.91	94.88
MAX	95.47	96.08	96.31	96.02	95.11	95.79	97.34	97.11	95.86	95.05	95.08	95.17
MIN	95.22	95.23	95.45	95.14	94.30	94.13	95.88	96.00	95.04	94.72	94.74	94.72

CAL YR 1979 MEAN 96.37 MAX 99.92 MIN 94.12
WTR YR 1980 MEAN 95.42 MAX 97.34 MIN 94.13

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-67, 1969-72, 1974 to current year.
CHEMICAL DATA: 1966-67 (a), 1969 (b), 1970 (c), 1971-72 (b), 1974-80 (c).
MINOR ELEMENTS DATA: 1974-80 (b).
PESTICIDE DATA: 1976-79 (b), 1980 (a).
ORGANIC DATA: OC--1974 (a), 1975-77 (b), 1978 (a), 1979-80 (c).
PCB--1978-79 (b), 1980 (a).
NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-80 (c).
BIOLOGICAL DATA:
Bacteria--1974 (a), 1975-80 (c).
Phytoplankton--1974 (a), 1975-78 (c), 1979 (b), 1980 (c).
Periphyton--1975 (c), 1976-80 (b).
SEDIMENT DATA: 1975-80 (c).

COOPERATION.--Pesticide samples were collected by the U.S. Geological Survey and were analyzed by the U.S. Environmental Protection Agency.

WATER QUALITY DATA, WATER YEAR, OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 01...	1300	138	7.8	14.0	1.0	10.0	96	K8	K3	59	14
NOV 05...	1300	145	7.5	7.0	1.0	11.4	94	42	K2	56	17
APR 21...	1030	144	7.9	5.5	.40	12.5	99	K8	K2	59	18
MAY 12...	1130	143	7.8	10.0	.55	8.2	75	K5	<1	56	16
JUN 09...	1300	145	7.3	14.0	.30	8.7	89	<1	<1	53	11
JUL 14...	1200	150	7.3	20.0	.50	8.2	93	K1	<1	56	14
AUG 12...	1300	135	7.6	23.5	.60	7.6	92	23	K5	56	10
SEP 08...	1200	141	7.4	20.5	.20	8.0	91	K12	--	59	20

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT 01...	17	4.1	5.3	1.1	45	13	7.5	.1	.8	80	76
NOV 05...	16	3.8	5.4	1.2	39	14	7.6	.1	.4	86	72
APR 21...	17	4.0	5.1	1.2	41	11	7.6	.1	.8	81	73
MAY 12...	16	4.0	5.5	1.1	40	13	7.6	.1	.4	86	72
JUN 09...	15	3.7	5.9	1.0	42	12	7.7	.1	.3	95	72
JUL 14...	16	3.8	5.2	1.1	42	10	7.6	.1	.4	72	70
AUG 12...	16	3.8	5.2	1.0	46	12	7.6	.1	.7	76	74
SEP 08...	17	4.0	5.4	1.2	39	13	7.7	.1	1.2	84	73

K Results based on colony count outside the acceptable range (non-ideal colony count).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR, OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT											
01...	.05	.02	.05	.09	.37	.24	.42	.33	.47	.35	.010
NOV											
05...	.04	.09	.01	.06	.29	.24	.30	.30	.34	.39	.010
APR											
21...	.18	.21	.07	.06	.19	.36	.26	.42	.44	.63	.020
MAY											
12...	.15	.14	.03	.04	.24	.12	.27	.16	.42	.30	.020
JUN											
09...	.14	.14	.05	.05	.23	.14	.28	.19	.42	.33	.010
JUL											
14...	.06	.07	.04	.04	.22	.26	.26	.30	.32	.37	.010
AUG											
12...	.06	.08	.04	.06	.26	.22	.30	.28	.36	.36	.030
SEP											
08...	.02	.03	.03	.04	.27	.07	.30	.11	.32	.14	.000

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)
OCT											
01...	.000	--	--	--	--	--	--	--	--	--	--
NOV											
05...	.000	0	1	0	10	0	1	10	10	0	0
APR											
21...	.010	0	0	<50	10	2	0	20	10	0	0
MAY											
12...	.010	--	--	--	--	--	--	--	--	--	--
JUN											
09...	.010	--	--	--	--	--	--	--	--	--	--
JUL											
14...	.010	1	1	<50	10	0	1	10	<10	0	0
AUG											
12...	.020	--	--	--	--	--	--	--	--	--	--
SEP											
08...	.000	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT											
01...	--	--	--	--	--	--	--	--	--	--	--
NOV											
05...	2	2	60	0	0	0	10	1	<.1	<.1	0
APR											
21...	4	3	110	10	12	15	10	2	.1	.1	1
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
09...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	1	1	100	20	0	0	20	9	.2	<.1	3
AUG											
12...	--	--	--	--	--	--	--	--	--	--	--
SEP											
08...	--	--	--	--	--	--	--	--	--	--	--

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR, OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)
OCT 01...	--	--	--	--	--	--	--	3.1	--	--
NOV 05...	1	0	0	0	0	30	6	--	6.8	.4
APR 21...	2	0	0	0	0	20	60	--	--	.3
MAY 12...	--	--	--	0	--	--	--	4.4	--	--
JUN 09...	--	--	--	--	--	--	--	4.4	--	--
JUL 14...	0	0	0	0	0	20	10	--	7.0	.3
AUG 12...	--	--	--	0	--	--	--	3.3	--	--
SEP 08...	--	--	--	--	--	--	--	3.9	--	--

PESTICIDE ANALYSES

DATE	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL (UG/L)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL (UG/L)
NOV 05...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL (UG/L)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV 05...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOTAL (UG/L)
NOV 05...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV 05...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND Material specifically analyzed for, but not detected.

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM R BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
APR							
21...	0945	275	1.0	144	5.5	12.5	101
21...	0946	275	5.0	146	6.0	12.6	102
21...	0947	275	10	145	5.5	13.0	105
21...	0948	275	15	144	5.5	12.2	98
21...	1015	550	1.0	145	5.0	13.2	105
21...	1016	550	5.0	145	5.0	13.2	105
21...	1017	550	10	144	5.0	13.2	105
21...	1018	550	15	144	5.0	13.2	105
21...	1100	825	1.0	148	5.0	13.0	103
21...	1101	825	5.0	148	5.0	13.1	104
21...	1102	825	10	146	5.0	13.1	104
21...	1104	825	20	146	5.0	13.1	104
21...	1105	825	25	145	5.0	12.6	100
21...	1130	1100	1.0	146	5.5	13.0	105
21...	1131	1100	5.0	146	5.0	13.1	104
21...	1132	1100	10	144	5.0	13.1	104
21...	1133	1100	15	145	5.0	13.1	104
21...	1134	1100	20	144	5.0	13.0	104
21...	1135	1100	25	144	5.0	12.1	96
21...	1215	1375	1.0	147	5.5	12.9	104
21...	1216	1375	5.0	146	5.5	13.0	105
21...	1217	1375	10	146	5.5	13.1	106
21...	1218	1375	15	146	5.5	13.0	105
JUN							
09...	1215	1375	1.0	145	14.5	8.5	87
09...	1216	1375	5.0	145	14.5	8.6	88
09...	1217	1375	10	145	14.5	8.6	88
09...	1218	1375	15	144	14.5	8.5	87
09...	1230	1100	1.0	131	14.0	8.6	88
09...	1231	1100	5.0	145	14.0	8.8	90
09...	1232	1100	10	145	14.0	8.8	90
09...	1233	1100	15	144	14.0	8.7	89
09...	1235	825	1.0	144	14.0	8.7	89
09...	1236	825	5.0	145	14.0	8.7	89
09...	1237	825	10	144	14.0	8.6	88
09...	1238	825	15	145	14.0	8.7	89
09...	1239	825	20	146	14.0	8.7	89
09...	1240	825	25	175	14.0	8.6	88
09...	1245	550	1.0	146	14.0	8.6	88
09...	1246	550	5.0	151	14.0	8.7	89
09...	1247	550	10	150	14.0	8.7	89
09...	1248	550	15	143	14.0	8.7	89
09...	1249	550	20	143	14.0	8.6	88
09...	1250	275	1.0	160	14.5	8.8	90
09...	1251	275	5.0	160	14.5	8.8	90
09...	1252	275	10	160	14.0	8.8	90
09...	1253	275	15	159	14.0	8.7	89
SEP							
08...	1130	275	1.0	142	20.5	8.3	95
08...	1131	275	5.0	141	20.5	8.0	92
08...	1132	275	10	142	20.0	8.3	94
08...	1133	275	15	142	20.0	8.6	97
08...	1145	550	1.0	141	20.5	8.1	93
08...	1146	550	5.0	141	20.5	8.1	93
08...	1147	550	10	141	20.5	8.2	94
08...	1148	550	15	141	20.0	8.4	95
08...	1201	825	1.0	140	20.5	8.2	94
08...	1202	825	5.0	142	20.5	8.0	92
08...	1203	825	10	141	20.5	8.0	92
08...	1204	825	15	141	20.5	8.0	92
08...	1205	825	20	140	20.5	7.9	90
08...	1215	1100	1.0	141	20.5	8.2	94
08...	1216	1100	5.0	141	20.5	8.0	91
08...	1217	1100	10	141	20.5	8.0	91
08...	1218	1100	15	140	20.5	8.0	91
08...	1219	1100	19	140	20.5	8.1	93
08...	1230	1375	1.0	144	20.5	8.6	97
08...	1231	1375	5.0	146	20.5	8.4	96
08...	1232	1375	8.0	146	20.5	7.7	88

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SEDIMENT, SUSPENDED (MG/L)	DATE	TIME	SEDIMENT, SUSPENDED (MG/L)
OCT			JUL		
01...	1300	2	14...	1200	1
NOV			AUG		
05...	1300	1	12...	1300	2
MAY			SEP		
12...	1130	5	08...	1200	1
JUN					
09...	1300	1			

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
May 12 to June 9	28	3.39	1.97	2.19	1.21	Polyethylene strip
June 9 to July 14	35	2.36	.787	1.47	1.14	Polyethylene strip
July 14 to Aug. 12	29	1.42	.472	1.63	.980	Polyethylene strip
Aug. 12 to Sept. 8	27	4.09	1.73	2.27	1.42	Polyethylene strip

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE	NOV 5,79	MAY 12,80	JUN 9,80	JUL 14,80	AUG 12,80	SEP 8,80
TIME	1300	1130	1300	1200	1300	1200
TOTAL CELLS/ML	140	640	3300	210	1400	230
DIVERSITY: DIVISION	1.4	1.7	1.3	0.9	0.8	1.8
.CLASS	1.4	1.7	1.3	0.9	0.8	1.8
..ORDER	1.8	2.3	1.5	1.2	1.5	1.9
...FAMILY	2.1	2.8	1.6	1.2	1.6	1.9
....GENUS	2.1	2.9	1.7	1.8	1.6	2.1

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHARACIACEAE												
....SCHROEDERIA	--	-	--	-	--	-	--	-	13	1	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	13	9	77	12	27	1	41#	20	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	230	7	82#	40	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	*	0	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	13	1	64#	28
....TREUBARIA	--	-	--	-	--	-	--	-	--	-	13	6
...SCENEDESMACEAE												
....SCENEDESMUS	52#	36	51	8	--	-	--	-	77	6	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	13	2	--	-	14	7	26	2	--	-
..ZYGNEMATALES												
...DESMIDIACEAE												
....COSMARIUM	13	9	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	13	2	55	2	--	-	13	1	13	6
....MELOSIRA	--	-	26	4	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	13	2	--	-	--	-	--	-	--	-
..PENNALES												
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	140#	22	55	2	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	690#	21	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	--	-	--	-	--	-	--	-	13	1	13	6
...NITZSCHIACEAE												
....NITZSCHIA	--	-	51	8	27	1	--	-	51	4	--	-
.CHRYSOPHYCEAE												
..CHRYSOMONADALES												
...OCHROMONADACEAE												
....OCHROMONAS	--	-	--	-	--	-	69#	33	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	39#	27	--	-	*	0	--	-	--	-	26	11
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	26#	18	64	10	--	-	--	-	270#	20	100#	44
....GOMPHOSPHAERIA	--	-	--	-	2100#	63	--	-	--	-	--	-
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	180#	28	--	-	--	-	890#	65	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	96	3	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	13	2	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...PERIDINIACEAE												
....PERIDINIUM	--	-	--	-	*	0	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04260990 CRANBERRY LAKE AT CRANBERRY LAKE, NY--Lat 44°13'14", long 74°50'55", St. Lawrence County, Hydrologic Unit 04150302, on right wall at outlet structure, at village of Cranberry Lake. DRAINAGE AREA, 144 mi^2 (373 km^2). PERIOD OF RECORD, April 1923 to current year. GAGE, nonrecording gage read daily at 1200 hours. Datum of gage is 1,469.75 ft (447.980 m) National Geodetic Vertical Datum of 1929.

Dam completed in 1867 and controlled storage for which records are available began in 1923. Usable capacity above elevation 1,475.25 ft (449.656 m) is 2,530 mil ft^3 (71.6 hm^3). Crest at spillway is at elevation, 1,486.43 ft (453.064 m). Length of spillway is 110 ft (34 m). Area of water surface at crest elevation is 10.9 mi^2 (28.2 km^2). Records furnished by Oswegatchie River-Cranberry Reservoir Commission.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed. 2,985 mil ft^3 (84.5 hm^3) May 13-15, 1971, gage height, 18.5 ft (5.64 m); minimum observed, 70 mil ft^3 (1.98 hm^3) Apr. 1-4, 1956, gage height, 6.0 ft (1.83 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 2,380 mil ft^3 (67.4 hm^3) April 15, gage height, 16.5 ft (5.03 m); minimum observed, 1,120 mil ft^3 (31.7 hm^3) Mar. 11-14, 17, gage height, 11.5 ft (3.50 m).

04266700 CARRY FALLS RESERVOIR NEAR SOUTH COLTON, NY--Lat 44°26'07", long 74°44'50", St. Lawrence County, Hydrologic Unit 04150305, near center of upstream wall of dam between Carry Falls and Stark Falls Reservoirs, 2.0 mi (3.2 km) southeast of Stark, and 8.8 mi (14.2 km) southeast of South Colton. DRAINAGE AREA, 873 mi^2 (2,261 km^2). PERIOD OF RECORD, October 1954 to current year. GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Dam completed January 1953 and controlled storage for which records are available began in October 1954. Usable capacity above elevation 1,332.0 ft (405.99 m) is 5,114.9 mil ft^3 (145 hm^3). Crest at spillway is at elevation 1,386.0 ft (422.45 m). Length of spillway is 830 ft (253 m). Area of water surface at crest elevation is 5.16 mi^2 or 13.4 km^2 (3,300 acres or 1,300 hm^2). The pond has a length of 6 mi (10 km) and a perimeter of 25 mi (40 km). Below crest elevation, capacity controlled by a taintor gate, 27 ft x 15 ft (8m x 5m), and 2 sluice gates, 10 ft x 10 ft (3m x 3m). Records furnished by Niagara Mohawk Power Corp.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 5,146 mil ft^3 (146 hm^3) June 1, 5, 6, 1955, elevation, 1,386.1 ft (422.48 m); minimum observed, 8.64 mil ft^3 (0.245 hm^3) Mar. 27-30, 1963, Apr. 4-11, 1964, elevation, 1,331.0 ft (405.69 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 5,022 mil ft^3 (142 hm^3) May 9, elevation, 1,385.2 ft (422.21 m); minimum observed, 1,123 mil ft^3 (31.8 hm^3) Mar. 15 and 16, elevation, 1,350.5 ft (411.63 m).

04273900 LAKE PLACID AT LAKE PLACID, NY (see station for daily mean elevations).

04278000 LAKE GEORGE AT ROGERS ROCK, NY (see station for daily mean gage heights).

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT (see station for daily mean gage heights).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY (see station for daily mean elevations).

MONTHEND GAGE HEIGHT, ELEVATION, AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Gage height (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	04260990 Cranberry Lake			04266700 Carry Falls Reservoir		
Sept. 30	15.0	1,970		1,377.3	3,952.8	
Oct. 31	15.2	2,022	+ 19.4	1,381.1	4,454.8	+ 187
Nov. 30	15.8	2,184	+ 62.5	1,381.1	4,454.8	0
Dec. 31	14.2	1,762	-158	1,374.8	3,628.8	- 308
CAL YR 1979			+ 11.1			+ 56.3
Jan. 31	12.4	1,318	-166	1,365.5	2,557.4	- 400
Feb. 29	11.7	1,164	- 61.4	1,353.1	1,347.8	- 483
Mar. 31	13.4	1,556	+146	1,353.5	1,382.4	+ 12.9
Apr. 30	16.0	2,240	+264	1,384.8	4,966.3	+ 1383
May 31	15.9	2,212	- 10.4	1,380.8	4,413.3	- 206
June 30	15.6	2,128	- 32.4	1,383.5	4,786.6	+ 144
July 31	15.6	2,128	0	1,381.1	4,454.8	- 124
Aug. 31	15.6	2,128	0	1,378.6	4,121.3	- 124
Sept. 30	15.8	2,184	+ 21.6	1,373.8	3,500.9	- 239
WTR YR 1980			+ 6.77			- 14.3

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1980

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS	
						DATE	DISCHARGE (CFS)
		HUDSON RIVER BASIN					
01334773	OWL KILL NEAR CAMBRIDGE, NY	LAT 43 00 36, LONG 73 23 09, WASHINGTON COUNTY, HYDROLOGIC UNIT 02020003, AT COUNTY ROAD 200 FT (61 M) UPSTREAM OF WHITE CREEK AND 1.2 MI (1.9 KM) SOUTH OF CAMBRIDGE.	--	--	1980	05-29-80 06-24-80 08-19-80 09-16-80	7.08 4.47 3.16 3.32
01334785	WHITE CREEK NEAR CAMBRIDGE, NY	LAT 43 00 37, LONG 73 22 57, WASHINGTON COUNTY, HYDROLOGIC UNIT 02020003, AT COUNTY ROAD, 1.2 MI (1.9 KM) SOUTH OF CAMBRIDGE.	--	0.3	1980	05-29-80 06-24-80 08-19-80 09-16-80	4.71 1.83 .10 .00
01334800	OWL KILL AT EAGLE BRIDGE, NY	LAT 42 57 08, LONG 73 22 57, WASHINGTON COUNTY, HYDROLOGIC UNIT 02020003, AT BRIDGE UPSTREAM FROM BRIDGE ON STATE HIGHWAY 67, AT EAGLE BRIDGE, RENSSELAER COUNTY.	56.4	--	1949 1956-61 1964 1980	05-29-80 06-24-80 08-19-80 09-16-80	16.6 10.2 5.17 4.94
01337700	DEANS CREEK AT WESTMORELAND, NY	LAT 43 06 55, LONG 75 24 14, ONEIDA COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE ON STATE HIGHWAY 233, AT WESTMORELAND.	--	--	1968 1977 1980	05-28-80	2.45
01348040	TIMMERMAN CREEK AT WEST ST. JOHNSVILLE,NY	LAT 42 59 52, LONG 74 42 00, MONTGOMERY COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE ON STATE HIGHWAY 5, AT WEST ST. JOHNSVILLE.	--	.4	1966 1978 1980	05-28-80 08-19-80	2.76 2.11
01349075	BRIMSTONE CREEK AT SHARON SPRINGS, NY	LAT 42 48 00, LONG 74 37 01, SCHOHARIE COUNTY, HYDROLOGIC UNIT 02020004. AT BRIDGE ON STATE HIGHWAY 10, 0.1 MI (0.2 KM) NORTH OF SHARON SPRINGS, AND 0.8 MI (1.3 KM) NORTH OF U.S. HIGHWAY 20.	2.44	--	1977 1980	05-28-80 08-19-80	1.49 1.94
01349080	BRIMSTONE CREEK NEAR AMES, NY	LAT 42 49 20, LONG 74 35 40, MONTGOMERY COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE ON STATE HIGHWAY 10, 0.2 MI (0.3 KM) NORTH OF COUNTY LINE, AND 1.2 MI (1.9 KM) SOUTH OF AMES.	7.61	2.4	1977 1980	05-28-80 08-19-80	2.52 1.94
01349495	CAYADUTTA CREEK NEAR JOHNSTOWN, NY	LAT 42 59 36, LONG 74 23 54, FULTON COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE 100 FT (30 M) UPSTREAM OF JOHNSTOWN SEWAGE TREATMENT PLANT, 200 FT (61 M) DOWNSTREAM OF UNNAMED TRIBUTARY, AND 1 MI (1.6 KM) SOUTHEAST OF JOHNSTOWN CITY BOUNDARY LINE.	--	--	1980	08-28-80	7.92

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1980--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS DATE	MEASUREMENTS DISCHARGE (CFS)
		HUDSON RIVER BASIN--Continued					
01356160[a]/	LISHA KILL AT MAYWOOD, NY	LAT 42 45 09, LONG 73 52 23, ALBANY COUNTY, HYDROLOGIC UNIT 02020004, AT DOWNSTREAM SIDE OF CULVERT ON CENTRAL AVENUE, 1.6 MI (2.6 KM) UPSTREAM FROM ALBANY-SCHENECTADY COUNTY LINE, AND 0.8 MI (1.3 KM) NORTHWEST OF MAYWOOD.	9.64	--	1979-80	11-08-79 12-11-79 01-17-80 02-28-80	3.38 2.20 1.79 .90
01356280[a]/	SHAKERS CREEK NEAR COLONIE, NY	LAT 42 44 08, LONG 73 48 50, ALBANY COUNTY, HYDROLOGIC UNIT 02020004, JUST UPSTREAM OF POND AT ANN LEE HOME, 1.8 MI (2.9 KM) NORTH OF COLONIE CENTRAL HIGH SCHOOL, AND 1.6 MI (2.6 KM) NORTHEAST OF COLONIE.	2.76	--	1979-80	11-08-79 12-11-79 01-17-80 02-28-80	1.14 1.14 .86 .61
01356285[a]/	SHAKERS CREEK TRIBUTARY NEAR COLONIE, NY	LAT 42 44 13, LONG 73 48 35, ALBANY COUNTY, HYDROLOGIC UNIT 02020004, JUST UPSTREAM OF POND AT ANN LEE HOME, 2.0 MI (3.2 KM) NORTH OF COLONIF CENTRAL HIGH SCHOOL, AND 1.6 MI (2.6 KM) NORTHEAST OF COLONIE.	.61	--	1979-80	11-08-79 12-11-79 01-17-80 02-28-80	.49 .36 .45 .0
01359131[a]/	PATROON CREEK AT CENTRAL AVENUE ALBANY, NY	LAT 42 41 15, LONG 73 47 56, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT DOWNSTREAM SIDE OF CULVERT ON CENTRAL AVENUE JUST SOUTH OF NEW YORK CENTRAL OVERCROSSING AT ROESSLEVILLE, AT ALBANY.	7.37	--	1979-80	11-08-79 12-11-79 02-28-80	7.76 7.05 5.37
01359132[a]/	SAND CREEK AT SAND CREEK ROAD, AT ALBANY, NY	LAT 42 41 13, LONG 73 46 47, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT UPSTREAM SIDE OF CULVERT ON SAND CREEK ROAD, 0.4 MI (0.6 KM) UPSTREAM OF NEW YORK CENTRAL RAILROAD, AT ALBANY.	2.79	--	1979-80	11-08-79 12-11-79 01-17-80 02-28-80	2.50 2.41 2.31 1.90
01359515[a]/	BLOCKHOUSE CREEK AT WESTMERE, NY	LAT 42 41 08, LONG 73 53 53, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT JUNCTION OF BLOCKHOUSE CREEK WITH SOUTH BRANCH BLOCKHOUSE CREEK, 0.2 MI (0.3 KM) EAST OF STATE HIGHWAY 155, AND 1.0 MI (1.6 KM) SOUTHWEST OF WESTMERE.	--	--	1967 1979-80	11-08-79 12-11-79 01-17-80 02-30-80	1.05 .97 .80 .97
01359516[a]/	SOUTH BRANCH BLOCKHOUSE CREEK AT WESTMERE, NY	LAT 42 41 07, LONG 73 53 52, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT JUNCTION OF SOUTH BRANCH WITH BLOCKHOUSE CREEK, 0.2 MI (0.3 KM) EAST OF STATE HIGHWAY 155, AND 1.0 MI (1.6 KM) SOUTHWEST OF WESTMERE.	--	--	1967 1979-80	11-08-79 12-11-79 01-17-80 02-28-80	.44 .42 .04 .26
01359523[a]/	KRUM KILL TRIBUTARY AT ALBANY, NY	LAT 42 40 36, LONG 73 50 10, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT BRIDGE ON MCKOWAN ROAD, 0.45 MI (0.72 KM) DOWNSTREAM FROM U.S. HIGHWAY 20 (WESTERN AVENUE), AT ALBANY.	1.43	0.5	1962 1979-80	11-08-79 12-11-79 01-17-80 02-28-80	1.40 1.34 1.19 .87
01364170	SAWKILL AT WOODSTOCK, NY	LAT 42 02 03, LONG 74 06 18, ULSTER COUNTY, HYDROLOGIC UNIT 02020006, AT BRIDGE ON CHESTNUT HILL ROAD, OFF STATE HIGHWAY 212, 0.3 MI (0.5 KM) EAST OF JUNCTION WITH STATE HIGHWAY 375, AT WOODSTOCK.	23.0	--	1966-67 1980	05-29-80 08-19-80 08-28-80	6.98 1.78 1.10

[a] Water-quality data included in this report.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1980--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS	
						DATE	DISCHARGE (CFS)
		HUDSON RIVER BASIN--Continued					
01372004	SWARTE KILL AT RIFTON, NY	LAT 41 49 56, LONG 74 01 55, ULSTER COUNTY, HYDROLOGIC UNIT 02020007, AT BRIDGE ON HARDENBURG ROAD, 0.6 MI (1.0 KM) SOUTHEAST OF RIFTON.	14.4	1.7	1978 1980	05-29-80 06-24-80	4.52 .66
01372068	LATTINTOWN CREEK NEAR MARLBORO, NY	LAT 41 37 09, LONG 73 59 30, ULSTER COUNTY, HYDROLOGIC UNIT 02020008, AT BRIDGE AT INTERSECTION OF LATTINTOWN - RIDGE ROADS, 1.4 MI (2.2 KM) NORTHWEST OF MARLBORO.	8.32	2.5	1978 1980	05-29-80 06-24-80	2.62 .37
01374645	LAKE CARMEL INLET AT KENT CORNERS, NY	LAT 41 28 19, LONG 73 39 15, PUTNAM COUNTY, HYDROLOGIC UNIT 02030101, ON STATE HIGHWAY 311, 0.4 MI (0.6 KM) NORTHEAST OF KENT CORNERS.	10.3	.3	1975-76 1978 1980	05-29-80 06-24-80 08-19-80	3.92 2.72 3.41
		DELAWARE RIVER BASIN					
01432850	MIDDLE MONGAUP RIVER AT LIBERTY, NY	LAT 41 47 26, LONG 74 43 55, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON STATE HIGHWAY 17, AT LIBERTY.	--	--	1965 1980	06-24-80 08-19-80	2.00 1.92
01432872	EAST MONGAUP RIVER TRIBUTARY AT HURLEYVILLE, NY	LAT 41 44 05, LONG 74 40 56, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT CULVERT ON TOWN ROAD, 0.4 MI (0.6 KM) WEST OF HURLEYVILLE.	--	.8	1980	05-28-80 06-24-80 08-28-80	1.98 1.46 .47
01432912	JUDSON BROOK NEAR WHITE LAKE, NY	LAT 41 41 31, LONG 74 49 35, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON STATE HIGHWAY 55, 1.1 MI (1.8 KM) DOWNSTREAM FROM BISHOPS POND, 2.2 MI (3.5 KM) UPSTREAM FROM MOUNTAIN LAKE, AND 1.3 MI (2.1 KM) NORTH OF WHITE LAKE.	4.03	--	1978 1980	08-28-80	0.24
01432915	WHITE LAKE BROOK AT WHITE LAKE, NY	LAT 41 40 30, LONG 74 49 11, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON STATE HIGHWAY 17B, 2.4 MI (3.9 KM) DOWNSTREAM FROM BISHOPS POND, 0.9 MI (1.4 KM) UPSTREAM FROM MOUNTAIN LAKE, AND 0.5 MI (0.8 KM) EAST OF WHITE LAKE.	6.81	--	1978 1980	05-28-80 08-19-80 08-28-80	6.18 2.2 E.5
01432920	WHITE LAKE BROOK AT SMALLWOOD, NY	LAT 41 39 29, LONG 74 48 39, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON PINE GROVE ROAD, 0.1 MI (0.2 KM) DOWNSTREAM FROM MOUNTAIN LAKE, 2.6 MI (4.2 KM) UPSTREAM FROM SWINGING BRIDGE RESERVOIR, AND 0.8 MI (1.3 KM) SOUTHEAST OF SMALLWOOD.	8.63	--	1978 1980	05-28-80 08-19-80	7.51 .96
		STREAMS TRIBUTARY TO ST. LAWRENCE RIVER					
04276760	MILL BROOK AT MORIAH CENTER, NY	LAT 44 03 40, LONG 73 30 30, ESSEX COUNTY, HYDROLOGIC UNIT 02010001, AT BRIDGE ON COUNTY ROAD AT MORIAH CENTER.	17.5	--	1966 1977 1980	05-29-80 08-20-80	11.1 5.5
04280400	METTAWEE RIVER AT GRANVILLE, NY	LAT 43 24 25, LONG 73 15 45, WASHINGTON COUNTY, HYDROLOGIC UNIT 02010001, AT BRIDGE ON STATE HIGHWAY 22, AT GRANVILLE.	115	--	1960-64 1966 1970 1973-74 1980	05-29-80 08-19-80 09-16-80	55.3 14.7 2.54

E Estimated.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1980

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Housatonic River basin					
01199477	Stony Brook near Dover Plains, NY	Lat 41°42'38", long 73°37'18", Dutchess County, at culvert on town road, 100 ft (30 m) upstream from Mill River, and 2.9 mi (4.7 km) southwest of Dover Plains.	1.93	1976-80	3-22-80	2.57	177
		Hudson River basin					
01319800	West Branch Sacandaga River at Arietta, NY	Lat 43°15'03", long 74°31'06", Hamilton County, at bridge on State Highway 10, 0.4 mi (0.6 km) north of Arietta.	28.9	1963-80	11-27-79 3-21-80	11.02 b11.19	1050 -
01319950	Sand Lake Outlet near Piseco, NY	Lat 43°22'15", long 74°09'48", Hamilton County, at bridge on State Highway 10, 0.9 mi (1.4 km) upstream from mouth and 5.5 mi (8.8 km) south of Piseco.	7.16	1962-66, 1968-80	4-28-79 3-21-80 4- 9-80	2.22 b2.83 2.72	- - -
01329154	Steele Brook at Shushan, NY	Lat 43°05'35", long 73°19'38", Washington County, at bridge on county road, 1.1 mi (1.8 km) upstream from mouth, and 0.8 mi (1.3 km) east of Shushan.	2.85	1979-80	3-21-79	3.78	36
01329780	Sessions Brook at Porters Corners, NY	Lat 43°09'21", long 73°52'45", Saratoga County, at culvert on County Highway 17, 0.7 mi (1.1 km) northeast of Porters Corners, and 0.9 mi (1.4 km) upstream from mouth.	1.12	1976, 1978-80	3-22-80	10.82	31
01330880	Saratoga Lake tributary near Bemis Heights, NY	Lat 42°59'43", long 73°43'06", Saratoga County, at culvert on State Highway 423, 1.4 mi (2.3 km) upstream from mouth, and 4.6 mi (7.4 km) northwest of Bemis Heights.	1.67	1968, 1970-71, 1973, 1975-80	3-22-80	12.01	74
01333367	Little Hoosic River at Cherry Plain, NY	Lat 42°37'57", long 73°21'23", Rensselaer County, at bridge on town road, just upstream from Kronk Brook, in Cherry Plain, 4.2 mi (6.8 km) south of Berlin.	2.22	1976-78, 1980	3-21-80		a100
01346820	Mohawk River tributary at Indian Castle, NY	Lat 43°00'34", long 74°47'47", Herkimer County, at culvert on State Highway 5S, 0.35 mi (0.6 km) west of Indian Castle, and 0.4 mi (0.7 km) upstream from mouth.	1.37	1974-80	3-22-80	5.05	210
01347460	Spruce Lake tributary near Salisbury Center, NY	Lat 43°10'51", long 74°48'44", Herkimer County, at culvert on town road (Jerseyfield Road), 1.3 mi (2.1 km) upstream from mouth, and 2.9 mi (4.7 km) north of Salisbury Center.	.53	1978-80	3-21-80 3-29-80	b2.65 2.45	- 22

a Approximately.
b Ice jam.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Hudson River basin--Continued					
01348420	North Creek near Ephratah, NY	Lat 43°00'28", long 74°33'54", Fulton County, at culvert on town road, 0.4 mi (0.7 km) upstream from mouth, and 1.2 mi (1.9 km) northwest of Ephratah.	6.68	1975-80	3-21-80	7.20	314
01349360	Van Wie Creek tributary near Randall, NY	Lat 42°54'11", long 74°25'55", Montgomery County, at culvert on Brumley Road, 0.3 mi (0.5 km) south of intersection with Argisinger Road, and 0.9 mi (1.4 km) southwest of Randall.	1.03	1974-80	3-21-80	8.88	219
01349850	Batavia Kill at Hensonville, NY	Lat 42°17'17", long 74°12'55", Greene County, on County Highway 40, at Hensonville, 0.7 mi (1.1 km) upstream from Silver Lake Outlet, and 1.8 mi (2.9 km) upstream from Nauvo Stream.	13.5	1955, 1960-66, 1972, 1974, 1976, 1978-80	1- 9-78 3-24-79 3-21-80	4.13 3.35 4.30	1140 636 1280
01350900	Beaverdam Creek near Knox, NY	Lat 42°38'57", long 74°07'56", Albany County, 250 ft (76 m) downstream from bridge, 1.2 mi (1.9 km) south of Knox, and 1.7 mi (2.7 km) upstream from mouth.	6.91	1963-64, 1966-74, 1976-77, 1979-80	3-22-80	6.52	-
01354200	Sandsea Kill at Pattersonville, NY	Lat 42°53'20", long 74°04'42", Schenectady County, at bridge on State Highway 5S, in village of Pattersonville.	9.56	1961, 1963-67, 1971-74, 1976-80	3-22-80	4.23	-
01354300	Plotter Kill at Rynex Corners, NY	Lat 42°49'16", long 74°04'20", Schenectady County, at bridge on State Highway 159, in hamlet of Rynex Corners.	3.70	1958, 1960-68, 1970-74, 1976-80	3-22-80	6.54	-
01355405	Indian Kill near Glenville Center, NY	Lat 42°53'40", long 73°57'27", Schenectady County, 1.1 mi (1.7 km) east of Glenville Center, and 1.3 mi (2.1 km) west of East Glenville.	2.39	1974-80	3-22-80	19.00	-
01361200	Claverack Creek near Claverack, NY	Lat 42°12'54", long 73°43'46", Columbia County, on right bank, 70 ft (21 m) upstream from bridge on State Highway 9H, 0.5 mi (0.9 km) south of Claverack.	60.6	1960-68‡ 1969-73 1975-80	3-18-80	6.76	1,620
01361453	Catskill Creek tributary at Franklinton, NY	Lat 42°31'35", long 74°18'33", Schoharie County, at culvert on town road, 0.15 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) northwest of Franklinton.	3.64	1968-72, 1974-80	3-21-80	7.7	a800
01361900	Shingle Kill at Cairo, NY	Lat 42°18'22", long 74°00'15", Greene County, at bridge on town road at Cairo, southeast of State Highway 32, about 400 ft (122 m) south of State Highway 23, and 0.8 mi (1.3 km) upstream from mouth.	13.9	1953, 1966-74, 1976-80	3-21-80	10.80	3,620
01362100	Roeliff Jansen Kill near Hillsdale, NY	Lat 42°09'13", long 73°31'14", Columbia County, at bridge on county highway off State Highway 22, 1.8 mi (2.9 km) south of Hillsdale.	27.5	1958-60‡, 1963-64, 1968-80	3-22-80	3.99	577
01362197	Bushnellsville Creek at Shandaken, NY	Lat 42°07'25", long 74°24'04", Ulster County, along State Highway 42, 0.4 mi (0.6 km) upstream from Esopus Creek, and 0.6 mi (0.97 km) northwest of Shandaken.	11.4	1951, 1956, 1972, 1976-80	4-20-72 1-26-76 3-30-77 11- 8-78 R3-24-79 3-21-80	8.10 8.17 9.69 9.48 8.40 10.22	R316 R324 R683 R625 372 848

a Approximately.
R Revised.
‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Hudson River basin--Continued					
01363388	Dry Brook at West Shokan, NY	Lat 41°58'22", long 74°17'50", Ulster County, at bridge on town road, 0.6 mi (1.0 km) northwest of West Shokan, and 1.2 mi (1.9 km) upstream from mouth.	1.67	1978-80	3-21-80	4.35	333
01368713	Wawayanda Creek at Durland, NY	Lat 41°16'44", long 74°18'20", Orange County, 75 ft (22.9 m) upstream from bridge on State School Road, at Durland, 0.1 mi (0.2 km) downstream from Wickham Lake, and 2.5 mi (4.0 km) northeast of Warwick.	5.15	1971-80	3-22-80	16.75	-
01368724	Long House Creek at Bellvale, NY	Lat 41°15'10", long 74°18'30", Orange County, at bridge on Iron Forge Road, at Bellvale, and 1.9 mi (3.1 km) upstream from mouth.	11.8	1971-80	3-22-80	18.50	-
01368810	Wawayanda Creek at New Milford, NY	Lat 41°14'18", long 74°25'03", Orange County, at bridge on Ryerson Road, at New Milford, 0.2 mi (0.3 km) upstream from Double Kill.	45.0	1971-80	3-22-80	17.25	1,320
01372200	Wappinger Creek near Clinton Corners, NY	Lat 41°48'55", long 73°45'50", Dutchess County, on right downstream wingwall of highway bridge 850 ft (259 m) downstream from abandoned bridge abutment of Philadelphia, Reading, and New England Railroad, 1,900 ft (579 m) downstream from East Branch Wappinger Creek, and 1 mi (1.6 km) south of Clinton Corners.	92.4	1956-76‡, 1977-80	3-22-80	10.85	2,160
01372948	Clove Creek near North Highland, NY	Lat 41°28'50", long 73°54'35", Putnam County, at bridge on Mill Road, 1.6 mi (2.6 km) northeast of North Highland.	12.1	1975-80	3-22-80	4.10	-
01373690	Woodbury Creek near Highland Mills, NY	Lat 41°22'00", long 74°06'17", Orange County, on left bank, 40 ft (12 m) downstream from culvert type bridge on road to Atlantic Coast Aggregate Corp. plant, 1,200 ft (365 m) downstream from bridge on State Highway 32, and 1.9 mi (3.1 km) north of Highland Mills.	11.2	1966-68‡, 1971-72, 1977-80	11- 8-77 1-25-79 3-21-80	5.45 5.07 4.87	1,130 957 873
01374130	Canopus Creek at Oscawana Corners, NY	Lat 41°22'43", long 73°52'23", Putnam County, at bridge on Hortun Hollow Road, 0.4 mi (0.6 km) downstream from West Branch, and 0.8 mi (1.3 km) west of Oscawana Corners.	8.30	1975-80	4-10-80	4.89	-
01374250	Peekskill Hollow Creek at Tompkins Corners, NY	Lat 41°23'18", long 73°48'47", Putnam County, at bridge on Bryant Pond Road, 0.9 mi (1.4 km) southwest of Tompkins Corners, and 1.1 mi (1.8 km) downstream from Wiccopee Brook.	14.96	1975-80	4-10-80	3.95	418
01374494	Haviland Hollow Brook near Putnam Lake, NY	Lat 41°29'03", long 73°34'16", Putnam County, at bridge on Haviland Hollow-Putnam Lake Road, 0.6 mi (1.0 km) upstream from mouth, and 2 mi (3.2 km) northwest of Putnam Lake.	12.19	1977-80	4-10-80	6.36	-
013744949	East Branch Croton River tributary near Deforest Corners, NY	Lat 41°25'16", long 73°33'00", Putnam County, at culvert on County Road 84, 1.7 mi (2.7 km) south of Deforest Corners, and 0.6 mi (1.0 km) west of New York and Connecticut line.	.61	1977-80	4-10-80	8.98	-

‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	 Gage height (feet)	 Dis-charge (ft³/s)
		Hudson River basin--Continued					
01374645	Lake Carmel Inlet at Kent Corners, NY	Lat 41°28'19", long 73°39'15", Putnam County, at culvert on State Highway 311, 0.3 mi (0.5 km) upstream from mouth, and 0.4 mi (0.6 km) northeast of Kent Corners.	10.3	1975-80	4-10-80	2.10	-
01376410	Saw Mill River at Eastview, NY	Lat 41°04'48", long 73°49'40", Westchester County, at bridge on Old Saw Mill River Road in Eastview, and 200 ft (61 m) upstream from Tarrytown Reservoir outlet.	12.49	1975, 1977-78, 1980	4-10-80	4.29	-
01376420	Saw Mill River at Elmsford, NY	Lat 41°03'19", long 73°49'16", Westchester County, at bridge on State Highway 119, 0.6 m (1.0 km) upstream from Rum Brook, and 0.8 mi (1.3 km) downstream from Mine Brook at Elmsford.	15.4	1979-80	4-10-80	11.11	860
		Hackensack River basin					
01376570	New City Brook near New City, NY	Lat 41°10'09", long 73°58'46", Rockland County, at bridge on road north of Christie Airport, 0.5 mi (0.8 km) east of Zukor Road, 0.8 mi (1.3 km) upstream from mouth, and 1.1 mi (1.8 km) north of New City.	5.51	1972-80	10- 6-79	6.27	-
01376600	Hackensack River at Brookside Park, NY	Lat 41°10'18", long 73°58'24", Rockland County, at Brookside Park, 900 ft (270 m) upstream from State Highway 304, 1,300 ft (400 m) upstream from DeForest Lake, 0.8 mi (1.3 km) downstream from unnamed tributary, and 1.2 mi (1.9 km) from Lake Lucille.	13.2	1959-63*, 1967-80	4-10-80	7.12	-
01376690	East Branch Hackensack River near Congers, NY	Lat 41°07'32", long 73°57'24", Rockland County, about 0.1 mi (0.2 km) downstream from small pond, half a mile (0.8 km) upstream from DeForest Lake, and 2 mi (3 km) south of Congers.	6.86	1960, 1968-69, 1971-80	4-10-80	10.11	495
01377180	Pascack Brook at Spring Valley, NY	Lat 41°06'45", long 74°02'00", Rockland County, on road to Orange and Rockland Utilities substation, and 0.7 mi (1.1 km) east of Spring Valley.	2.13	1972-80	4-10-80	3.62	-
01377200	Pascack Brook tributary at Spring Valley, NY	Lat 41°06'15", long 74°01'57", Rockland County, 250 ft (76 m) upstream from mouth, on right downstream wingwall of bridge on Pascack Road at Spring Valley.	4.58	1960-62* 1963-74, 1976-80	10- 5-79	6.04	-
01387410	Torne Brook at Ramapo, NY	Lat 41°08'34", long 74°09'41", Rockland County, 0.2 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) east of Ramapo.	2.62	1960, 1962-80	3-22-80	7.39	-
		Delaware River basin					
01417185	Campbell Brook tributary near Downsville, NY	Lat 42°02'41", long 74°58'37", Delaware County, at culvert on Campbell Brook Road, 200 ft (61 m) upstream from mouth, 2.0 mi (3.2 km) southwest of Downsville Dam, and 2.7 mi (4.3 km) southeast of Downsville.	.41	1975-80	11-26-79	4.36	57
01437345	Basher Kill tributary near Westbrookville, NY	Lat 41°30'34", long 74°32'36", Sullivan County, at culvert on town road, 0.2 mi (0.3 km) upstream from mouth, and 1.0 mi (1.6 km) northeast of Westbrookville.	1.51	1975-80	3-21-80	5.76	-

* Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Streams tributary to Lake Ontario					
042490673	North Branch Grindstone Creek near Altmar, NY	Lat 43°29'31", long 76°05'41", Oswego County, at culvert on Hong Kong Road, 4.1 mi (6.6 km) upstream from confluence with South Branch Grindstone Creek, and 4.1 mi (6.6 km) southwest of Altmar.	11.2	1976-80	3-22-80	11.08	369
04256040	Mill Creek tributary near Lowville, NY	Lat 43°45'43", long 75°31'13", Lewis County, at culvert on West Road, 2.0 mi (3.2 km) southwest of Lowville, and 2.2 mi (3.5 km) upstream from mouth.	1.68	1976-80	11-27-79	12.71	258
04258700	Deer River at Deer River, NY	Lat 43°55'49", long 75°35'31", Lewis County, on left bank 350 ft (107 m) upstream from bridge on State Highway 26 at Deer River, and 2 mi (3.2 km) upstream from mouth.	98.1	1957-69‡, 1977-80	11-27-79	6.27	7,160
04260575	Horse Creek tributary near Dexter, NY	Lat 44°04'47", long 76°03'28", Jefferson County, at bridge on Weaver Road, 0.3 mi (0.5 km) upstream from mouth, 1.0 mi (1.6 km) southwest of Reynolds Corners, and 5.1 mi (8.2 km) north of Dexter.	4.59	1976-80	3-18-80	12.74	430
		Streams tributary to St. Lawrence River					
04263445	Birch Creek at Pierces Corners, NY	Lat 44°25'42", long 75°32'16", St. Lawrence County, at culvert on Old State Road at Pierces Corners, 4.4 mi (7.1 km) southeast of Pope Mills, and 11.1 mi (17.9 km) upstream from mouth.	1.56	1977-80	3- 6-77 4- 3-78 9-15-79 3-23-80	3.96 4.90 3.83 3.72	70 85 36 62
04264300	Brandy Brook near Waddington, NY	Lat 44°49'42", long 75°04'32", St. Lawrence County, at bridge on Halfway House Road, 3.2 mi (5.1 km) southeast of Waddington, and 4.4 mi (8.2 km) upstream from mouth.	27.0	1959-63‡, 1964-69, 1976-80	3-19-80 4-10-80	b7.85 6.37	- -
04265100	Elm Creek near Hermon, NY	Lat 44°26'14", long 75°12'52", St. Lawrence County, on left bank, 100 ft (30 m) downstream from highway bridge, 2.3 mi (3.7 km) south of Hermon, and 6.8 mi (10.9 km) upstream from confluence with Tanner Creek.	33.0	1958-68‡, 1969-80	4-29-80	7.37	742
04267800	Trout Brook at Allen Corners, NY	Lat 44°47'33", long 75°01'59", St. Lawrence County, at abandoned bridge off State Highway 56A, at Allen Corners, and 2 mi (3 km) southwest of Norfolk.	56.2	1958-63‡ 1964-65, 1967-74, 1976-80	3-20-80	9.34	1,310
04268200	Plum Brook at Grantville, NY	Lat 44°52'45", long 74°54'52", St. Lawrence County, at bridge on Grant Road, 0.7 mi (1.1 km) downstream from unnamed tributary, 1.1 mi (1.8 km) upstream from mouth, 1.4 mi (2.3 km) north of Grantville, and 2.3 mi (3.7 km) southwest of Massena city limits.	37.6	1958-63‡, 1964, 1966-68, 1971-80	4-10-80	4.91	599
04268720	Hopkinton Brook at Hopkinton, NY	Lat 44°40'59", long 74°41'58", St. Lawrence County, at bridge on town road, 0.4 mi (0.6 km) upstream from unnamed tributary, 0.6 mi (1.0 km) south of Hopkinton, and 2.0 mi (3.2 km) upstream from mouth.	18.5	1967, 1969, 1973-74, 1976-80	11-27-79 12-25-79	2.36 b4.64	- -

b Ice jam.
‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1980--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi²)	Period of record	Date	Gage height (feet)	Discharge (ft³/s)
Streams tributary to St. Lawrence River--Continued							
04268800	West Branch St. Regis River near Parishville, NY	Lat 44°35'52", long 74°44'19", St. Lawrence County, at highway bridge, 4.1 mi (6.6 km) downstream from Mud Pond Outlet, 4.2 mi (6.8 km) southeast of Parishville, and 4.8 mi (7.7 km) upstream from Niagara Mohawk Power Corp. dam.	172	1959-68* 1969, 1971, 1974, 1976-80	2- 1-80 4-10-80	b4.27 3.34	- 1,260
04269050	Allen Brook near Brasher Falls, NY	Lat 44°48'07", long 74°43'40", St. Lawrence County, at bridge on U.S. Highway 11, 0.8 mi (1.3 km) upstream from mouth, and 2.2 mi (3.5 km) east of Brasher Falls.	16.0	1961-66*, 1967-74 1976-80	11-27-79 3-20-80	3.71 b4.13	288 -
04269100	Lawrence Brook near Moira, NY	Lat 44°50'22", long 74°35'46", Franklin County, at highway bridge, 2.4 mi (3.9 km) northwest of Moira, and 5.4 mi (8.7 km) upstream from mouth.	28.0	1959-60*, 1961-80	11-27-79 3-20-80	5.39 b6.32	475 -
04269500	Deer River at Brasher Iron Works, NY	Lat 44°53'32", long 74°41'28", St. Lawrence County, 400 ft (122 m) upstream from highway bridge, at Brasher Iron Works, 2.6 mi (4.2 km) southeast of Helena, 3.6 mi (5.8 km) upstream from mouth, and 3.8 mi (6.1 km) downstream from Lawrence Brook.	189	1913-16*, 1959-68*, 1969, 1971-74, 1976-80	12-25-79 3-20-80	b5.35 4.98	- 1,630
04270100	West Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'49", long 74°28'49", Franklin County, at highway bridge, 0.8 mi (1.3 km) west of Fort Covington Center, 2.1 mi (3.4 km) upstream from East Branch, and 3.1 mi (5.0 km) south Fort Covington.	31.4	1962-74, 1976-80	3-14-77 11-27-79 3-20-80	7.21 5.94 b6.24	R1,440 859 -
04270150	East Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'52", long 74°27'51", Franklin County, at highway bridge, at Fort Covington Center, 1.9 mi (3.1 km) upstream from West Branch, and 3.2 mi (5.1 km) south of Fort Covington.	23.1	1961-62*, 1963-74, 1976-80	12-25-79 4-10-80	b6.55 5.52	- 707
04270162	East Branch Little Salmon River near Skerry, NY	Lat 44°47'13", long 74°22'12", Franklin County, at culvert on Adams Road, 100 ft (30 m) downstream from Limekiln Brook, 1.1 mi (1.8 km) northeast of Skerry, and 5.7 mi (9.0 km) upstream from mouth.	7.11	1978-80	6-20-78 3- 5-79 9-15-79 3-20-80	6.80 b4.33 3.90 3.26	240 - 100 73
04270700	Trout River at Trout River, NY	Lat 44°59'23", long 74°17'56", Franklin County, at bridge on county highway, 0.2 mi (0.3 km) east of State Highway 30, at Trout River, 0.5 mi (0.8 km) upstream from international boundary, 1.5 mi (2.4 km) downstream from unnamed tributary, and 3.3 mi (5.3 km) downstream from Little Trout River.	107	1960-66*, 1967-74, 1976-80	11-27-79 3-20-80	5.28 b7.13	2,290 -
04273700	Salmon River at South Plattsburgh, NY	Lat 44°38'24", long 73°29'43", Clinton County, on left bank, at bridge on Salmon River Road, at South Plattsburgh, 0.4 mi (0.6 km) west of State Highway 22, and 3.9 mi (6.3 km) upstream from mouth.	61.9	1960-68*, 1969, 1971-80	11-27-79 3-20-80	2.55 b4.61	- -
04276200	Bouquet River at New Russia, NY	Lat 44°09'51", long 73°36'30", Essex County, at county highway bridge, 0.2 mi (0.3 km) east of State Highway 9, at New Russia.	37.6	1949, 1951, 1953, 1956-68, 1971-73, 1976-78, 1980	11-26-79	16.76	6,400

b Ice jam.
R Revised.
* Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1980

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		Hudson River basin				
01328752 Hudson River	Atlantic Ocean	Lat 43°09'45", long 73°35'04", between Saratoga and Washington Counties, at Fort Miller, 0.1 mi (0.2 km) upstream of dam.			7-13-80	1,430
01349495 Cayadutta Creek	Mohawk River	Lat 42°59'36", long 74°23'54", Fulton County, at bridge on town road, 2.3 mi (3.7 km) upstream from Fulton-Montgomery County line, and 0.6 mi (1.0 km) west of Johnstown City boundary line.		1976	8-28-80	*7.9
01349514 Cayadutta Creek	Mohawk River	Lat 42°58'02", long 74°25'15" Montgomery County, at bridge on State Highway 334 1.6 mi (2.6 km) southeast of Sammonsville.		1971 1976	5-28-80 8-19-80	*36.9 *36.6
01359513a/ Hunger Kill	Normans Kill	Lat 42°41'23", long 73°54'26", Albany County, at bridge on Nott Road, 0.25 mi (0.4 km) upstream from Blockhouse Creek, 0.7 mi (1.1 km) upstream from mouth, and 1 mi (1.6 km) south of Guilderland.	8.16	1962-65 1967-77‡ 1979	11- 8-79 12-11-79 1-17-80 2-28-80	*9.58 *8.46 *8.57 *6.44
01359517 Blockhouse Creek	Hunger Kill	Lat 42°41'08", long 73°54'05", Albany County, at bridge on State Highway 155, 0.15 mi (0.2 km) upstream from Kaikout Kill, 0.4 mi (0.6 km) upstream from mouth, and 1.4 mi (2.3 km) south of Guilderland.	1.96	1962-65 1967 1970 1973-75 1979	11- 8-79 12-11-79 1-17-80 2-28-80	*1.38 *1.48 *1.24 *1.12
0135980220 Muitzes Kill	Schodack Creek	Lat 42°28'40", long 73°43'15", Rensselaer County, at county road, 0.2 mi (0.3 km) upstream of Vly Creek and 0.6 mi (1.0 km) east of village of Muitzes Kill.			6-24-80	*2.29
0135980230 Vly Creek	Muitzes Kill	Lat 42°28'43", long 73°42'57", Rensselaer County, at county road, 0.2 mi (0.3 km) upstream of Muitzes Kill and 0.9 mi (1.4 km) east of village of Muitzes Kill.			5-30-80 6-24-80	*2.59 *2.50
01359903 Feuri Spruyt	Coeymans Creek	Lat 42°31'55", long 73°51'49", Albany County at a site south of State Highway 396, 0.2 mi (0.3 km) upstream of unnamed tributary, 0.7 mi (1.13 km) east of South Bethlehem.			6-24-80 8-19-80	0 0
01359904 Feuri Spruyt	Coeymans Creek	Lat 42°31'40", long 73°50'50', Albany County, at bridge on County Highway 101, 0.25 mi (0.4 km) south of South Bethlehem.	7.50	1970 1973-75	5-30-80 6-24-80 8-19-80	*.16 *.22 e*0.2
01361570 Ten Mile Creek	Catskill Creek	Lat 42°24'26", long 74°08'06", Greene County, at bridge on State Highway 81, about 1,500 ft (457 m) upstream from mouth, and 0.9 mi (1.4 km) east of Oak Hill, and 2.3 mi (3.7 km) downstream from Eightmile Creek.	35.3	1953 1955 1968-78‡	3-21-80	p3,800

* Base flow.
‡ Operated as a continuous-record gaging station.
a Water-quality data included in this report.
e Estimated.
p Peak discharge.

Discharge measurements made at miscellaneous sites during water year 1980--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Discharge (ft^3/s)
		Hudson River basin--Continued				
01364220 Esopus Creek	Hudson River	Lat 41°59'42", long 73°59'52", Ulster County, at bridge on County Highway 31, 1.2 mi (1.9 km) downstream from Saw Kill and 0.5 mi (0.8 km) northwest of Lake Katrine.			8-22-80	16.8
		Delaware River basin				
01421200 Cadosia Creek	East Branch Delaware River	Lat 41°58'03", long 75°15'51", Delaware County, at bridge on State Highway 236, 0.3 mi (0.5 km) upstream from mouth, at Cadosia.	17.7	1949-50 1955 1957-79	4-24-80 5-20-80 6- 4-80 6-17-80 7-15-80 8-19-80 9-18-80	*23.3 14.4 5.84 6.35 2.33 2.11 9.10
01425665 Oquaga Creek	West Branch Delaware River	Lat 42°11'06", long 75°25'27", Broome County, at bridge on North Sanford Road, 0.3 mi (.5 km) upstream from small tributary 0.5 mi (0.8 km) west of Arctic, 1.3 mi (2.1 km) upstream from station 01425675 Oquaga Creek near North Sanford, and 2.6 mi (4.2 km) northeast of North Sanford.	1.15	1969-78	4- 9-80 5-20-80 6- 3-80 8-18-80	11.6 0.48 .42 .01
01425670 Oquaga Creek Tributary	Oquaga Creek	Lat 42°10'56", long 75°25'16", Broome County, 0.2 mi (0.3 km) upstream from mouth, 0.4 mi (0.6 km) southwest of Arctic, 0.4 mi (0.6 km) downstream from bridge on East Afton Road, and 2.5 mi (4.0 km) northwest of North Sanford.	2.37	1969-78	4- 9-80 5-20-80 6- 3-80 8-18-80	17.0 1.41 1.17 .14
01426000 Oquaga Creek	West Branch Delaware River	Lat 42°03'35", long 75°25'40", Broome County, on left bank, 200 ft (60 m) upstream from washed-out dam at rear of Delaware Mills, 400 ft (120 m) upstream from Mill Street Bridge in Deposit, and 0.3 mi (0.5 km) upstream from mouth.	66.4	1941-73‡ 1975-76 1979	4-24-80 5-20-80 6- 4-80 6-17-80 7-15-80 8-19-80 9-18-80	71.4 40.4 14.7 12.6 6.61 5.50 43.8
01428000 Tenmile River	Delaware River	Lat 41°33'51", long 75°00'56", Sullivan County, on left bank 0.5 mi (0.8 km) downstream from East Branch Tenmile River, 0.8 mi (1.3 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Tusten.	45.0	1946-73‡ 1978-79	4-24-80 5-20-80 6- 4-80 6-17-80 7-15-80 8-19-80 9-18-80	*59.9 43.0 24.4 9.12 5.18 3.44 1.10
01432874 East Mongaup River	Mongaup River	Lat 41°44'34", long 74°42'05", Sullivan County, at Highway bridge 1.5 mi (2.4 km) west of Hurleyville and 2.4 mi (3.9 km) East northeast of Harris.			8-19-80	2.62
01433600 Shingle Kill	Delaware River	Lat 41°24'27", long 74°44'05", Orange County, at bridge on State Highway 97, 1,700 ft (518 m) upstream from mouth, and 0.8 mi (1.3 km) northwest of Sparrow Bush.	12.4	1958-68	9- 5-80	*.86

* Base flow.

‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1980--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Delaware River basin--Continued				
01436583 Sheldrake Stream	Neversink River	Lat 41°46'11", long 74°39'27", Sullivan County, at outlet of Loch Sheldrake at State Highway 52, at Loch Sheldrake, 5.0 mi (8.0 km) southeast of Liberty.			9-18-80	0
01436800 Bush Kill	Neversink River	Lat 41°30'34", long 74°39'20", Sullivan County, at timber bridge on dirt road, 0.4 mi (0.6 km) northwest of Oakland Valley.	19.5	1957-79	5-23-80 6- 6-80 8-20-80	23.9 11.3 3.72
01438000 Neversink River	Delaware River	Lat 41°21'40", long 74°41'07", Orange County, at Tristates Bridge on East Main Street (U.S. Highway 6), in Port Jervis, 450 ft (137 m) upstream from Clove Brook, and 0.6 mi (1.0 km) upstream from mouth.	346	1902-03 1943 1945 1960-62 1965-79	10-31-79 1-16-80 5-14-80 6-18-80 8-21-80 9-16-80	331 286 667 153 96.0 81.0
01438100 Mill Brook	Delaware River	Lat 41°21'34", long 74°41'09", Orange County, at bridge on Maple Street, at Port Jervis, and 400 ft (122 m) upstream from mouth.	13.1	1958-68 1979	9- 5-80	*2.22
		Streams tributary to St. Lawrence River				
04269043 Deer River	St. Regis River	Lat 44°47'57", long 74°40'24", St. Lawrence County, on right bank 0.4 mi (0.6 km) upstream from abandoned railroad bridge, 0.5 mi (0.8 km) upstream from dam at Kraft Co. plant at North Lawrence, and 1.7 mi (2.7 km) downstream from Kingston Brook.	88.2	1973-79‡	11- 8-79 1-31-80	102 50.4
04276215 The Branch	Bouquet River	Lat 44°13'14", long 73°36'53", Essex County, 300 ft (91 m) upstream from State Highway 9N, and 1.0 mi (1.6 km) west of Elizabethtown.	19.1		11-26-79	p6,600
04276500 Bouquet River	Lake Champlain	Lat 44°21'30", long 73°23'42", Essex County, on right bank at Willsboro, 0.5 mi (0.8 km) upstream from bridge on State Highway 22, 2.5 mi (4.0 km) downstream from North Branch Bouquet River and 3.0 mi (4.8 km) upstream from mouth.	275	1904-08‡ 1923-68‡ 1974	11-27-79	9,240

* Base flow.
‡ Operated as a continuous-record gaging station.
p Peak discharge.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS $CACO_3$)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
HUDSON RIVER BASIN								
01356160 - LISHA KILL AT MAYWOOD NY (LAT 42 45 09 LONG 073 52 23)								
APR , 1980								
02...	0935	462	7.6	3.5	160	50	9.7	28
01356280 - SHAKERS CREEK NEAR COLONIE NY (LAT 42 44 08 LONG 073 48 50)								
APR , 1980								
02...	1005	430	7.5	4.0	150	46	8.2	27
01356285 - SHAKERS CREEK TRIB AT COLONIE NY (LAT 42 44 13 LONG 073 48 35)								
APR , 1980								
02...	0950	568	7.3	4.0	190	56	11	40
01359131 - PATROON CREEK AT CENTRAL AVE IN ALBANY NY (LAT 42 41 15 LONG 073 47 56)								
APR , 1980								
02...	1040	750	7.9	6.0	200	62	11	73
424142073495901 - RENSSELAER LAKE AT SIXMILE WATERWRKS ALBANY NY (LAT 42 41 42 LONG 073 49 59)								
APR , 1980								
02...	0800	639	7.7	7.5	170	53	9.5	61
01359132 - SAND CREEK AT SAND CREEK ROAD AT ALBANY NY (LAT 42 41 13 LONG 073 46 47)								
APR , 1980								
02...	1030	622	8.0	4.0	250	73	16	31
01359513 - HUNGER KILL AT GUILDERLAND NY (LAT 42 41 22 LONG 073 54 26)								
APR , 1980								
02...	0845	490	7.9	4.5	160	50	8.3	36
01359515 - BLOCKHOUSE CREEK AT WESTMERE NY (LAT 42 41 08 LONG 073 53 53)								
APR , 1980								
02...	0915	635	8.1	5.5	220	65	13	61
01359516 - SOUTH BRANCH BLOCKHOUSE CREEK AT WESTMERE NY (LAT 42 41 07 LONG 073 53 52)								
APR , 1980								
02...	0905	365	7.9	5.5	140	41	8.6	19
01359517 - BLOCKHOUSE CREEK NEAR GUILDERLAND NY (LAT 42 41 08 LONG 073 54 05)								
APR , 1980								
02...	0855	558	8.0	5.0	190	58	11	38
01359523 - KRUM KILL TRIBUTARY AT ALBANY NY (LAT 42 40 36 LONG 073 50 10)								
APR , 1980								
02...	0830	800	7.8	6.5	190	59	11	77

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	CHLORIDE, DISSOLVED (MG/L AS CL)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
HUDSON RIVER BASIN--Continued								
01356160 - LISHA KILL AT MAYWOOD NY (LAT 42 45 09 LONG 073 52 23)								
APR , 1980								
02...	2.0	47	.41	.20	.14	.34	.75	.010
01356280 - SHAKERS CREEK NEAR COLONIE NY (LAT 42 44 08 LONG 073 48 50)								
APR , 1980								
02...	1.6	47	.47	.12	.26	.38	.85	.020
01356285 - SHAKERS CREEK TRIB AT COLONIE NY (LAT 42 44 13 LONG 073 48 35)								
APR , 1980								
02...	3.0	70	.24	.16	.43	.59	.83	.000
01359131 - PATROON CREEK AT CENTRAL AVE IN ALBANY NY (LAT 42 41 15 LONG 073 47 56)								
APR , 1980								
02...	2.5	120	.47	.14	.15	.29	.76	.000
424142073495901 - RENSSELAER LAKE AT SIXMILE WATERWRKS ALBANY NY (LAT 42 41 42 LONG 073 49 59)								
APR , 1980								
02...	2.1	99	.28	.13	.28	.41	.69	.000
01359132 - SAND CREEK AT SAND CREEK ROAD AT ALBANY NY (LAT 42 41 13 LONG 073 46 47)								
APR , 1980								
02...	3.2	55	1.1	.11	.17	.28	1.4	.010
01359513 - HUNGER KILL AT GUILDERLAND NY (LAT 42 41 22 LONG 073 54 26)								
APR , 1980								
02...	1.6	58	1.2	.06	.13	.19	1.4	.010
01359515 - BLOCKHOUSE CREEK AT WESTMERE NY (LAT 42 41 08 LONG 073 53 53)								
APR , 1980								
02...	1.5	69	2.0	.07	.02	.09	2.1	.010
01359516 - SOUTH BRANCH BLOCKHOUSE CREEK AT WESTMERE NY (LAT 42 41 07 LONG 073 53 52)								
APR , 1980								
02...	1.7	28	.69	.12	.64	.76	1.5	.010
01359517 - BLOCKHOUSE CREEK NEAR GUILDERLAND NY (LAT 42 41 08 LONG 073 54 05)								
APR , 1980								
02...	1.8	60	1.2	.10	.25	.35	1.6	.010
01359523 - KRUM KILL TRIBUTARY AT ALBANY NY (LAT 42 40 36 LONG 073 50 10)								
APR , 1980								
02...	2.7	130	.58	.23	.37	.60	1.2	.010

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

AT HINCKLEY, NY

LOCATION.--Lat 43°18'35", long 75°06'35", Oneida County, at National Weather Service station "Hinckley," at Hinckley Dam on West Canada Creek, on Cody Road in Hinckley.

PERIOD OF RECORD.--Water years 1966 to January 1980 (discontinued) (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for the 1979 water year were delayed beyond the usual time period. Specific Conductance and pH were measured within approximately two months after the end of the composite period. However chemical analyses were not done until the end of the water year. From the time of receipt until analyses all samples were stored at 4°C.

WATER QUALITY DATA, SEPTEMBER 1978 TO JANUARY 1980

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
78/09/27 TO 78/10/31	4.28	.41	.13	.05	.02	3.30	.17	.0
78/10/31 TO 78/11/30	2.08	.71	.18	.19	.05	4.00	.22	.1
78/11/30 TO 79/01/01	3.92	.35	.06	.14	.03	2.20	.16	.1
79/01/01 TO 79/01/30	8.52	.16	.03	.13	.01	1.40	.13	.0
79/01/30 TO 79/03/01	5.83	.24	.04	.32	.06	.90	.25	.0
79/03/01 TO 79/03/30	5.83	.24	.05	.19	.01	2.60	.17	.0
79/03/30 TO 79/05/01	4.08	.32	.07	.12	.02	2.00	.14	.0
79/10/05 TO 79/10/31	3.28	.65	.02	.12	.77	3.50	.31	.1
79/10/31 TO 79/11/28	4.52	.23	.86	.18	.11	2.80	.35	.0
79/11/28 TO 79/12/31	2.58	.75	.07	.21	.10	1.80	.40	.0
80/01/05 TO 80/01/25	2.45	1.30	.25	.55	.08	3.40	.74	.0

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/09/27 TO 78/10/31	.484	.133	-----	.005	21	4.40	.123	38
78/10/31 TO 78/11/30	.771	.489	-----	.012	32	4.20	.104	40
78/11/30 TO 79/01/01	.688	.300	-----	.004	31	4.10	.112	12
79/01/01 TO 79/01/30	.411	.100	-----	.002	21	4.25	.086	40
79/01/30 TO 79/03/01	.419	.211	-----	.009	28	4.20	.106	28
79/03/01 TO 79/03/30	.468	.222	-----	.004	35	4.15	.156	30
79/03/30 TO 79/05/01	.379	.244	-----	.003	24	4.33	.126	16
79/10/05 TO 79/10/31	.938	.526	-----	.090	22	4.30	-----	25
79/10/31 TO 79/11/28	.760	.373	-----	.010	22	4.10	-----	28
79/11/28 TO 79/12/31	1.100	.774	-----	.019	25	4.10	-----	19
80/01/05 TO 80/01/25	.548	.438	-----	.022	13	4.80	-----	4

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

HUDSON RIVER BASIN

AT ROCK HILL, NY

LOCATION.--Lat 41°37'25", long 74°31'17", Sullivan County, on North Shore Road, just north of Wanaksink Lake, 0.9 mi (1.4 km) east of Rock Hill, 3.5 mi (5.6 km) northwest of National Weather Service station "Rock Hill 3SW," and 6.5 mi (10.5 km) southeast of Monticello.

PERIOD OF RECORD.--Water years 1966 to May 1979 (discontinued) (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for the 1979 water year were delayed beyond the usual time period. Specific Conductance and pH were measured within approximately two months after the end of the composite period. However chemical analyses were not done until the end of the water year. From the time of receipt until analyses all samples were stored at 4°C.

WATER QUALITY DATA, OCTOBER 1978 TO MAY 1979

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
78/10/01 TO 78/10/31	2.85	.33	.09	.32	.11	3.70	.41	.0
78/10/31 TO 78/12/01	2.29	.68	.49	.05	.09	4.80	.53	.0
78/12/01 TO 79/01/02	4.86	.68	.32	.31	.04	1.70	.38	.0
79/01/02 TO 79/02/01	9.13	.32	.08	.10	.16	.50	.27	.0
79/02/01 TO 79/03/01	3.11	.31	.05	.17	.04	1.10	.19	.0
79/03/01 TO 79/04/01	3.26	.45	.24	1.00	.06	3.60	1.80	.0
79/04/01 TO 79/05/01	4.22	.32	.08	.21	.14	2.40	.40	.0

PERIOD OF COLLECTION	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/10/01 TO 78/10/31	.655	.250	-----	.069	41	3.95	.147	120
78/10/31 TO 78/12/01	1.200	.400	-----	.033	49	4.15	.113	15
78/12/01 TO 79/01/02	.865	.378	-----	.008	19	4.30	.092	39
79/01/02 TO 79/02/01	.387	.044	-----	.037	12	4.55	.059	26
79/02/01 TO 79/03/01	.242	.125	-----	.032	16	4.50	.067	1
79/03/01 TO 79/04/01	.627	.211	-----	.011	28	4.23	.152	20
79/04/01 TO 79/05/01	.468	.167	-----	.010	34	4.22	.163	14

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HUDSON RIVER BASIN

NEAR ALBANY, NY

LOCATION.--Lat 42°44'35", long 73°48'30", Albany County, at National Weather Service station "Albany WSO AP," at Albany County Airport, 0.5 mi (0.8 km) north of State Highway 155.

PERIOD OF RECORD.--Water years 1966 to August 1979 (discontinued) (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for the 1979 water year were delayed beyond the usual time period. Specific Conductance and pH were measured within approximately two months after the end of the composite period. However, chemical analyses were not done until the end of the water year. From the time of receipt until analyses all samples were stored at 4°C.

WATER QUALITY DATA, OCTOBER 1978 TO AUGUST 1979

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
78/09/30 TO 78/11/03	2.95	1.50	.33	.27	.05	5.40	.75	.1
78/11/03 TO 78/12/01	.91	----	----	----	----	----	----	---
78/12/01 TO 78/12/30	3.05	1.20	.27	.88	.19	4.40	1.20	.1
78/12/30 TO 79/02/01	6.40	.31	.08	----	.01	1.80	.44	.0
79/02/01 TO 79/03/07	2.66	.77	.21	.74	.01	4.10	1.00	.1
79/03/07 TO 79/03/25	.59	----	----	----	----	----	----	---
79/03/25 TO 79/05/01	5.18	1.00	.26	.37	.05	3.60	.38	.0
79/06/27 TO 79/08/03	3.69	.92	.55	.31	5.20	12.0	2.10	.1

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/09/30 TO 78/11/03	1.200	.333	-----	.038	45	4.10	.139	100
78/11/03 TO 78/12/01	2.700	1.000	-----	.153	69	4.70	.094	---
78/12/01 TO 78/12/30	.760	.256	-----	.012	33	4.30	.091	68
78/12/30 TO 79/02/01	.355	.089	-----	.007	22	4.25	.090	76
79/02/01 TO 79/03/07	.854	.189	-----	.033	39	4.10	.126	40
79/03/07 TO 79/03/25	1.600	.333	-----	.012	--	----	-----	66
79/03/25 TO 79/05/01	.635	.230	-----	.008	22	4.50	.141	24
79/06/27 TO 79/08/03	9.400	9.700	-----	4.000	172	4.30	.499	16

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HUDSON RIVER BASIN

NEAR DELMAR, NY

LOCATION.--Lat 42°36'36", long 73°53'34", Albany County, at New York State Department of Environmental Conservation's Five River Educational Center, 600 ft (182 m) northwest of vistor's center, 0.7 mi (1.1 km) north of State Highway 43, 3.0 mi (4.8 km) west of Delmar.

PERIOD OF RECORD.--December 1979 to September 1980 (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage. Analysis of samples for the 1979 water year were delayed beyond the usual time period. Specific conductance and pH were measured within approximately two months after the end of the composite period. However chemical analyses were not done until the end of the water year. From the time of receipt until analyses all samples were stored at 4°C.

WATER QUALITY DATA, DECEMBER 1979 TO SEPTEMBER 1980

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
79/12/11 TO 80/01/02	.88	----	----	----	----	.40	.84	---
80/02/07 TO 80/03/03	.89	----	----	----	----	2.40	.47	---
80/03/03 TO 80/04/02	5.45	.27	.03	.10	.02	2.10	.21	---
80/04/02 TO 80/05/06	3.14	.73	.12	.00	.08	3.10	.41	---
80/05/13 TO 80/06/24	2.79	.91	.15	.17	.23	4.80	.16	---
80/07/01 TO 80/09/09	4.62	1.40	.28	.31	.63	11.0	.19	---
80/09/16 TO 80/09/30	1.25	.90	1.10	.45	.59	7.70	.70	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
79/12/11 TO 80/01/02	.520	.536	-----	.104	--	----	-----	---
80/02/07 TO 80/03/03	-----	-----	-----	-----	16	4.99	.083	---
80/03/03 TO 80/04/02	.509	.240	-----	.015	7	4.60	.170	6
80/04/02 TO 80/05/06	.519	.541	-----	.019	23	4.20	.073	10
80/05/13 TO 80/06/24	.620	.790	.850	.046	34	4.33	.100	6
80/07/01 TO 80/09/09	1.100	2.800	2.900	.410	49	4.51	-----	17
80/09/16 TO 80/09/30	.910	2.300	-----	.309	38	5.80	-----	---

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CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT STILLWATER RESERVOIR, NY

LOCATION.--Lat 43°53'28", long 75°02'10", Herkimer County, at National Weather Service station "Stillwater Reservoir", 0.3 mi (0.5 km) northwest of New York State Department of Environmental Conservation forest ranger's cabin, 0.8 mi (1.3 km) southeast of Stillwater Reservoir dam, and 6.8 mi (10.9 km) west of Beaver River.

PERIOD OF RECORD.--October 1977 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for the 1979 water year were delayed beyond the usual time period. Specific Conductance and pH were measured within approximately two months after the end of the composite period. However chemical analyses were not done until the end of the water year. From the time of receipt until analyses all samples were stored at 4°C.

WATER QUALITY DATA, OCTOBER 1978 TO OCTOBER 1980

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
78/10/01 TO 78/10/31	4.08	.29	.06	.15	.03	6.10	.20	.1
78/10/31 TO 78/11/30	1.60	.29	.06	.11	.18	3.90	.32	.1
78/11/30 TO 79/01/01	4.07	.20	.03	.08	.02	1.90	.16	.0
79/01/01 TO 79/02/01	5.38	.09	.02	.09	.01	.80	.12	.0
79/02/01 TO 79/03/05	2.03	.20	.04	.14	.02	2.30	.21	.0
79/03/05 TO 79/04/03	4.00	.29	.06	.14	.04	3.20	.18	.0
79/04/03 TO 79/05/01	3.53	.16	.03	.06	.02	1.40	.11	.0
79/10/31 TO 79/11/30	5.02	.17	.50	.15	.04	1.70	.09	.0
79/11/30 TO 80/01/01	2.51	.88	.23	.71	.19	.80	.29	---
80/01/01 TO 80/02/07	2.24	.90	.15	.20	.04	2.60	.20	.1
80/02/07 TO 80/03/10	1.90	----	----	----	----	4.20	.27	.0
80/03/10 TO 80/04/01	2.61	.10	.01	.10	.01	1.10	.14	.0
80/04/01 TO 80/05/01	4.17	.47	.06	.00	.03	2.00	.16	---
80/05/01 TO 80/05/31	1.29	1.50	.16	.01	.14	5.00	.27	---
80/05/31 TO 80/07/01	4.81	.64	.09	.04	.13	2.40	.08	---
80/07/01 TO 80/07/31	6.40	.35	.04	.01	.03	2.90	.13	---
80/07/31 TO 80/08/31	2.59	.64	.08	.02	.03	5.30	.41	---
80/08/31 TO 80/10/06	5.18	.77	.01	.13	.01	4.80	.48	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/10/01 TO 78/10/31	.854	.378	-----	.004	68	3.90	.194	48
78/10/31 TO 78/11/30	.854	.444	-----	.011	46	3.95	.152	54
78/11/30 TO 79/01/01	.771	.256	-----	.004	35	4.05	.131	78
79/01/01 TO 79/02/01	.492	1.110	-----	.020	23	4.20	.095	36
79/02/01 TO 79/03/05	.875	.300	-----	.010	35	4.00	.123	0
79/03/05 TO 79/04/03	.854	.344	-----	.006	46	4.05	.168	16
79/04/03 TO 79/05/01	.298	.178	-----	.008	17	4.44	.106	8
79/10/31 TO 79/11/30	.482	.136	-----	.010	14	4.10	-----	11
79/11/30 TO 80/01/01	.790	.344	-----	.015	--	----	-----	---
80/01/01 TO 80/02/07	.774	.400	-----	.035	--	----	-----	---
80/02/07 TO 80/03/10	-----	-----	-----	-----	58	3.90	.212	---
80/03/10 TO 80/04/01	.424	.110	-----	.010	9	4.30	.094	5
80/04/01 TO 80/05/01	.632	.329	-----	.008	29	4.20	.128	9
80/05/01 TO 80/05/31	.890	.810	-----	.062	31	4.69	.065	---
80/05/31 TO 80/07/01	.430	.470	-----	.063	24	4.39	.090	6
80/07/01 TO 80/07/31	.490	.370	.350	.019	31	4.21	.119	8
80/07/31 TO 80/08/31	.660	.400	-----	.019	50	3.90	-----	16
80/08/31 TO 80/10/06	.610	.340	.290	.009	39	3.94	-----	13

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ST. LAWRENCE RIVER BASIN

AT LAKE GEORGE, NY

LOCATION.--Lat 43°24'58", long 73°42'31", Warren County, in Lake George Battlefield Park, 0.2 mi (0.3 km) south of the South end of Lake George, 0.2 mi (0.3 km) east of U.S. Highway 9, 0.2 mi south of Village of Lake George and 0.7 mi (1.1 km) east of Interstate Highway 87.

PERIOD OF RECORD.--June to September 1980 - (monthly composite)
June to September 1980 - (storm event wetfall)
June to September 1980 - (monthly dustfall)

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101* wet/dry precipitation collector. An automatic sensor detects occurrences of precipitation, activating a motor which removes a cover from the wetfall collection vessel and covers the dustfall collection vessel. When precipitation ceases the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The opening of the collector is approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage. Analysis of samples for the 1979 water year were delayed beyond the usual time period. Specific Conductance and pH were measured within approximately two months after the end of the composite period. However chemical analyses were not done until the end of the water year. From the time of receipt until analyses all samples were stored at 4°C.

WATER QUALITY DATA, JUNE 1979 TO OCTOBER 1980

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
80/06/12 TO 80/08/05	4.60	1.40	.67	.33	2.80	7.10	.35	---
80/08/05 TO 80/09/02	2.45	.60	.17	.01	.06	8.30	.40	---
80/09/02 TO 80/10/07	3.53	.41	.03	.15	.11	3.30	.43	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
80/06/12 TO 80/08/05	4.600	.270	3.600	.724	70	4.36	.128	24
80/08/05 TO 80/09/02	.250	.400	-----	.032	57	3.86	-----	25
80/09/02 TO 80/10/07	.510	.137	.410	.012	36	4.10	-----	12

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN--Continued

AT LAKE GEORGE, NY--Continued

STORM EVENT WETFALL

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	FLUO- RIDE (F) (MG/L)
80/06/12 TO 80/07/01	1.25	----	----	----	----	3.60	.39	---
80/07/16 TO 80/07/22	2.62	.50	.09	.04	.06	4.70	.12	---
80/07/22 TO 80/07/30	.19	.49	.07	----	.04	3.10	.21	---
80/07/30 TO 80/08/06	.54	.47	.07	.35	.12	5.90	.01	---
80/08/06 TO 80/08/25	.96	.01	.01	.21	.02	4.20	.10	---
80/08/25 TO 80/09/02	1.60	.34	.03	.21	.05	5.20	.07	---
80/09/03 TO 80/09/24	.96	.32	.02	.27	.11	4.00	.25	---
80/09/25 TO 80/09/26	1.41	.06	.01	2.30	.04	1.60	.10	---

PERIOD OF COLLECTION	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
80/06/12 TO 80/07/01	.520	.220	-----	.024	18	5.71	.055	---
80/07/16 TO 80/07/22	.350	.190	-----	.053	40	4.06	.156	10
80/07/22 TO 80/07/30	.380	.220	-----	.001	29	4.23	.124	10
80/07/30 TO 80/08/06	.570	.330	-----	.013	56	3.76	-----	18
80/08/06 TO 80/08/25	.640	.330	.290	.000	53	3.91	-----	0
80/08/25 TO 80/09/02	.660	.440	.570	.001	57	3.91	-----	17
80/09/03 TO 80/09/24	.620	.200	.380	.002	50	4.00	-----	9
80/09/25 TO 80/09/26	.350	.073	.150	.001	24	4.26	-----	5

MONTHLY DUSTFALL

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	FLUO- RIDE (F) (MG/L)
80/06/23 TO 80/07/30	-----	1.00	1.20	.23	.73	1.70	.19	---
80/07/30 TO 80/09/24	-----	1.50	.24	.24	1.80	4.30	.21	---

PERIOD OF COLLECTION	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
80/06/23 TO 80/07/30	.240	.380	.780	.189	14	6.40	.034	9
80/07/30 TO 80/09/24	.410	.104	.410	.194	18	5.58	-----	12

ST. LAWRENCE RIVER BASIN

NEAR CANTON, NY

LOCATION.--Lat 44°34'40", long 75°06'40", St. Lawrence County, at National Weather Service station "Canton 4SE," on the Canton State University Farm on State Highway 68, 2.5 mi (4.0 km) southeast of U.S. Highway 11 and Canton.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling. Analysis of samples for the 1979 water year were delayed beyond the usual time period. Specific Conductance and pH were measured within approximately two months after the erd of the composite period. However chemical analyses were not done until the end of the water year. From the time of receipt until analyses all samples were stored at 4°C.

WATER QUALITY DATA, OCTOBER 1978 TO SEPTEMBER 1980

PERIOD OF COLLECTION	INCHES OF PRECIPI-TATION	CAL-CIUM (CA) (MG/L)	MAGNE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS-SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	FLUO-RIDE (F) (MG/L)
78/10/02 TO 78/11/01	3.17	.68	.31	.11	.10	2.40	.09	.0
78/11/01 TO 78/12/01	1.87	.84	.46	.09	.08	2.40	.10	.1
78/12/01 TO 79/01/02	.40	.16	.04	.15	.03	.40	.09	.0
79/01/02 TO 79/02/01	3.72	.34	.16	.22	.01	.80	.38	.0
79/02/01 TO 79/03/01	.82	.56	.32	.70	.04	1.60	.76	.0
79/03/01 TO 79/04/02	1.89	1.10	.66	.46	.28	5.00	.62	.1
79/04/02 TO 79/05/01	4.74	.54	.30	.12	.09	1.20	.30	.0
79/07/02 TO 79/08/01	3.39	.61	.29	.17	.20	2.40	.16	.0
79/10/05 TO 79/11/01	2.62	1.10	.39	.15	.18	2.90	.55	.0
79/11/01 TO 79/12/03	3.63	.66	.08	.23	----	3.40	.43	.0
79/12/03 TO 80/01/02	2.60	.99	.35	.78	.08	1.40	.97	.0
80/01/02 TO 80/02/01	1.03	----	----	----	----	2.30	1.10	.0
80/02/01 TO 80/02/29	.68	----	----	----	----	4.90	5.90	---
80/02/29 TO 80/04/01	2.72	.90	.50	.57	.02	2.70	.69	.0
80/04/01 TO 80/05/05	4.10	.92	.35	.00	.09	2.10	.13	.0
80/05/05 TO 80/06/02	1.41	2.30	.84	.07	.46	9.20	.35	---
80/06/02 TO 80/07/01	1.76	1.40	.49	.08	.39	5.00	.21	---
80/07/01 TO 80/08/01	4.41	.67	.23	.01	.11	2.20	.09	---
80/08/01 TO 80/09/02	4.41	.58	.17	.02	.07	.04	.19	---
80/09/02 TO 80/10/01	3.71	.06	.08	.16	.12	3.30	.21	---

PERIOD OF COLLECTION	NIT-RITE+ NIT-RATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/10/02 TO 78/11/01	.531	.422	-----	.034	19	4.85	.061	24
78/11/01 TO 78/12/01	.729	.456	-----	.015	18	5.00	.050	160
78/12/01 TO 79/01/02	.247	.089	-----	.026	23	4.50	.073	39
79/01/02 TO 79/02/01	.444	.122	-----	.011	16	4.50	.058	26
79/02/01 TO 79/03/01	.594	.356	-----	.006	21	4.80	.056	4
79/03/01 TO 79/04/02	2.200	1.400	-----	.166	51	4.30	.145	24
79/04/02 TO 79/05/01	.552	.178	-----	.055	15	4.74	.084	4
79/07/02 TO 79/08/01	.403	.677	-----	.083	17	5.10	.074	12
79/10/05 TO 79/11/01	.782	.579	-----	.109	25	4.75	.078	46
79/11/01 TO 79/12/03	1.000	.398	-----	.050	14	4.70	-----	65
79/12/03 TO 80/01/02	.740	.385	-----	.034	14	4.70	-----	17
80/01/02 TO 80/02/01	.357	.438	-----	.035	--	----	-----	---
80/02/01 TO 80/02/29	-----	-----	-----	-----	51	5.54	.083	---
80/02/29 TO 80/04/01	.818	.275	-----	.025	13	5.60	.058	5
80/04/01 TO 80/05/05	.670	.434	-----	.021	11	5.00	.112	11
80/05/05 TO 80/06/02	1.400	.950	-----	.024	53	4.34	.115	---
80/06/02 TO 80/07/01	.690	.500	-----	.053	28	4.86	.060	32
80/07/01 TO 80/08/01	.410	.250	.250	.041	22	4.41	.101	21
80/08/01 TO 80/09/02	.530	.410	-----	.022	38	4.03	-----	35
80/09/02 TO 80/10/01	.550	.210	.220	.007	27	4.11	-----	18

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* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

ST. LAWRENCE RIVER BASIN

NEAR CHAZY, NY

LOCATION.--Lat 44°53'15", long 73°28'01", Clinton County, at Cornell University meteorological station at William H. Miner Agriculture Research Institute, 0.1 mi (0.2 km) southeast of intersection of State Highway 191 and Ridge Road, and 1.4 mi (2.2 km) West of Chazy.

PERIOD OF RECORD.--Water years 1975 to current year (monthly composite).

EQUIPMENT.--Prior to Nov. 19, 1979 the composite sample collector was a straight-sided glass funnel approximately 6.5 in. (165 mm) in diameter which drained into a Teflon* receiving bottle. A fritted glass disk was used as a filter between the collector and the receiving bottle and was replaced at the end of each collection period. The glass funnel was heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. Subsequent to Nov. 19, 1979, the glass funnel and fritted glass filter system was replaced with a glass funnel and a looped plastic tubing connecting the funnel with the receiving bottle to retard evaporation. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the Cornell University meteorological station for the reported period of sampling. Analysis of samples for the 1979 water year were delayed beyond the usual time period. Specific Conductance and pH were measured within approximately two months after the end of the composite period. However chemical analyses were not done until the end of the water year. From the time of receipt until analyses all samples were stored at 4°C.

WATER QUALITY DATA, SEPTEMBER 1978 TO SEPTEMBER 1980

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	FLUORIDE (F) (MG/L)
78/09/29 TO 78/11/01	3.50	.32	.06	.10	.02	2.40	.10	.0
78/11/01 TO 78/11/30	.77	----	----	----	----	----	----	---
78/11/30 TO 79/01/03	4.48	.42	.06	.33	.04	1.90	.26	.0
79/01/03 TO 79/02/05	2.41	.39	.08	.22	.01	2.70	.23	.0
79/02/05 TO 79/02/28	.61	----	----	----	----	----	----	---
79/02/28 TO 79/04/03	3.26	.55	.14	.12	.02	----	----	---
79/04/03 TO 79/05/01	2.82	----	----	----	----	1.70	.16	.0
79/10/01 TO 79/11/01	2.61	.32	.08	.13	.09	2.40	.11	.0
79/11/01 TO 79/11/30	2.77	.34	.08	.37	.14	3.30	.53	.0
79/11/30 TO 79/12/28	1.50	.74	.04	.29	.02	1.00	.15	.1
80/03/01 TO 80/04/01	1.77	.81	.13	.37	.01	2.60	.34	---
80/04/01 TO 80/05/01	2.92	.52	.07	.00	.02	2.70	.15	.0
80/05/01 TO 80/06/01	2.30	1.70	.30	.02	.23	6.40	.16	---
80/06/01 TO 80/07/01	.91	----	----	----	.06	4.50	.27	---
80/07/01 TO 80/08/01	1.18	.99	.18	.02	.21	7.70	.22	---
80/08/01 TO 80/09/01	3.63	.31	.05	.02	.03	5.20	.15	---
80/09/01 TO 80/10/01	3.16	----	----	----	----	1.30	.30	---

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	AMMONIA +ORGANIC NITROGEN AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
78/09/29 TO 78/11/01	.476	.400	-----	.000	29	4.20	.097	20
78/11/01 TO 78/11/30	-----	-----	-----	-----	45	4.10	.119	---
78/11/30 TO 79/01/03	.771	.344	-----	.000	28	4.20	.107	76
79/01/03 TO 79/02/05	.771	.311	-----	.001	17	4.40	.073	260
79/02/05 TO 79/02/28	.725	.144	-----	.006	34	5.10	.058	---
79/02/28 TO 79/04/03	1.400	.422	-----	.005	28	4.17	.058	16
79/04/03 TO 79/05/01	1.900	.033	-----	.002	12	4.96	.060	8
79/10/01 TO 79/11/01	.306	.211	-----	.128	25	4.30	.167	6
79/11/01 TO 79/11/30	.833	.322	-----	.010	11	4.60	-----	17
79/11/30 TO 79/12/28	.550	.260	-----	.018	12	4.30	-----	13
80/03/01 TO 80/04/01	.827	.300	-----	.014	20	4.60	.076	---
80/04/01 TO 80/05/01	.858	.395	-----	.008	29	4.10	.178	0
80/05/01 TO 80/06/01	.840	.780	-----	.014	34	4.73	.087	---
80/06/01 TO 80/07/01	.570	.340	-----	.057	23	5.32	.038	---
80/07/01 TO 80/08/01	.900	1.100	-----	.069	55	4.06	.142	---
80/08/01 TO 80/09/01	.540	.410	-----	.028	52	3.85	-----	12
80/09/01 TO 80/10/01	.330	.184	-----	.027	25	4.04	-----	---

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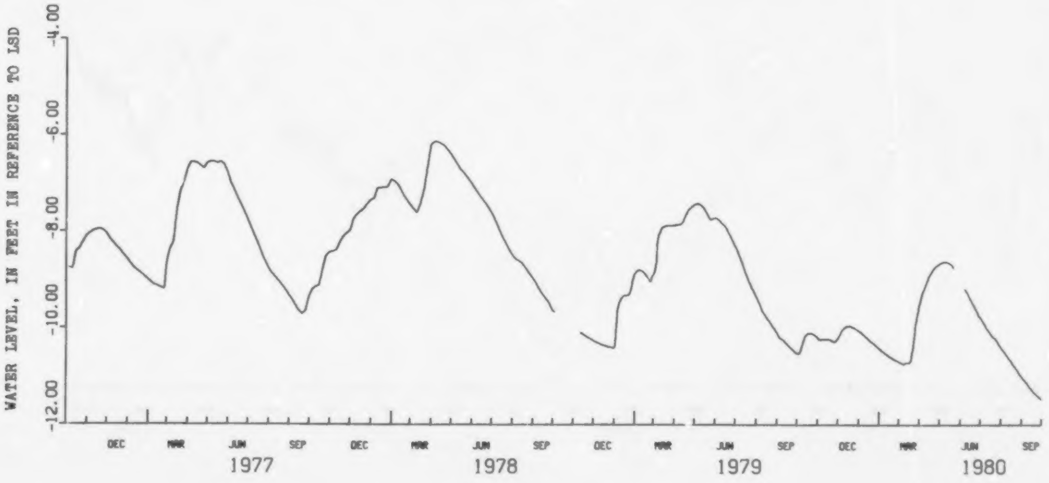
ALBANY COUNTY

424114073495402. Local number, A 636.
LOCATION.--Lat 42°41'14", long 73°49'54", Hydrologic Unit 02020006, Fuller Road, Albany.
Owner: State University of New York at Albany.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 21 ft (6.4 m), cased to 22 ft (6.7 m), 2-in. (0.05-m) jet point (60-gauze screen 22 ft or 6.7 m to 24 ft or 7.3 m). Well gravel packed from original depth of 26 ft (7.9 m).
DATUM.--Altitude of land-surface datum is 260 ft (79 m), from topographic map. Measuring point: Top of casing, 2.40 ft (0.732 m) above land-surface datum.
REMARKS.--Well was drilled May 1974 as a replacement for 424114073495401 (local number A 635), located 35 ft (10.7 m) north, which has a period of record from November 1965 to May 1974 (unpublished).
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for May 1974 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft (1.87 m) below land-surface datum, April 12, 13, 1978; lowest, 11.47 ft (3.50 m) below land-surface datum, Sept. 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.52	10.20	10.20	10.05	10.42	10.69	9.49	8.66	---	9.78	10.40	11.00
2	10.52	10.22	10.17	10.06	10.43	10.70	9.44	8.65	---	9.80	10.42	11.02
3	10.53	10.23	10.15	10.07	10.45	10.70	9.38	8.64	---	9.81	10.44	11.04
4	10.52	10.23	10.12	10.08	10.46	10.71	9.33	8.64	---	9.84	10.46	11.06
5	10.50	10.24	10.09	10.09	10.47	10.72	9.28	8.63	---	9.86	10.48	11.07
6	10.46	10.24	10.06	10.11	10.48	10.72	9.24	8.63	---	9.89	10.49	11.09
7	10.42	10.23	10.04	10.12	10.49	10.73	9.21	8.62	---	9.91	10.51	11.10
8	10.37	10.23	10.02	10.13	10.50	10.74	9.18	8.62	---	9.93	10.53	11.12
9	10.32	10.23	10.01	10.14	10.51	10.74	9.15	8.62	---	9.96	10.55	11.14
10	10.27	10.22	9.99	10.16	10.52	10.73	9.11	8.62	9.23	9.99	10.57	11.16
11	10.23	10.22	9.98	10.17	10.53	10.72	9.07	8.63	9.25	10.01	10.59	11.18
12	10.19	10.23	9.97	10.18	10.54	10.71	9.04	8.63	9.27	10.03	10.61	11.20
13	10.16	10.23	9.96	10.19	10.55	10.72	9.00	8.63	9.30	10.05	10.63	11.22
14	10.14	10.23	9.96	10.21	10.56	10.71	8.97	8.63	9.33	10.07	10.65	11.23
15	10.13	10.23	9.95	10.22	10.57	10.71	8.93	8.64	9.36	10.09	10.66	11.25
16	10.11	10.23	9.95	10.23	10.58	10.71	8.90	8.65	9.39	10.11	10.68	11.27
17	10.11	10.23	9.95	10.25	10.59	10.71	8.88	8.66	9.42	10.13	10.70	11.29
18	10.10	10.23	9.95	10.26	10.60	10.70	8.86	8.67	9.44	10.15	10.73	11.30
19	10.10	10.24	9.94	10.27	10.61	10.66	8.84	8.68	9.47	10.17	10.75	11.32
20	10.10	10.24	9.96	10.28	10.62	10.58	8.81	8.69	9.49	10.18	10.77	11.33
21	10.10	10.25	9.97	10.29	10.62	10.50	8.79	---	9.52	10.19	10.78	11.35
22	10.10	10.26	9.97	10.30	10.63	10.41	8.77	---	9.54	10.20	10.80	11.36
23	10.10	10.26	9.98	10.31	10.64	10.29	8.75	---	9.57	10.21	10.82	11.37
24	10.11	10.27	9.98	10.32	10.65	10.15	8.74	---	9.60	10.23	10.84	11.39
25	10.12	10.28	9.99	10.33	10.65	10.03	8.72	---	9.63	10.25	10.86	11.40
26	10.13	10.28	9.99	10.35	10.66	9.93	8.71	---	9.65	10.27	10.88	11.41
27	10.14	10.28	10.00	10.36	10.67	9.84	8.70	---	9.68	10.29	10.90	11.42
28	10.15	10.26	10.01	10.37	10.67	9.76	8.70	---	9.72	10.32	10.93	11.44
29	10.16	10.24	10.02	10.39	10.68	9.69	8.68	---	9.75	10.34	10.95	11.45
30	10.17	10.22	10.03	10.40	---	9.62	8.67	---	9.76	10.36	10.97	11.46
31	10.19	---	10.04	10.41	---	9.55	---	---	---	10.38	10.98	---

WTR YEAR 1980 HIGHEST 8.62 May 7, 8, 9, 10, 1980 LOWEST 11.47 Sept. 30, 1980



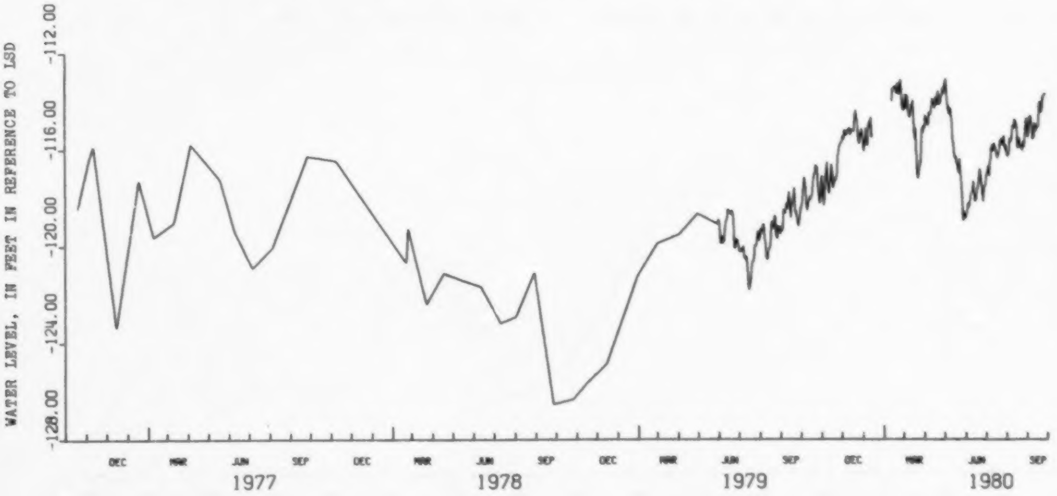
ALBANY COUNTY

424044073535101. Local number, A 637.
LOCATION.--Lat 42°40'44", long 73°53'51", Hydrologic Unit 02020006, Dr. Shaw Road, Guilderland.
Owner: Mill Hill Missionaries.
AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 198 ft (60.4 m), cased to 193 ft (58.8 m), 30-slot plastic screen 193 ft (58.8 m) to 198 ft (60.4 m).
DATUM.--Altitude of land-surface datum is 220 ft (67 m), from topographic map. Measuring point: Top of casing, 3.50 ft (1.067 m) above land-surface datum.
REMARKS.--Water level affected by pumping from nearby municipal well field.
PERIOD OF RECORD.--September 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 112.94 ft (34.42 m) below land-surface datum, May 5, 1980; lowest measured, 126.55 ft (38.57 m) below land-surface datum, September 27, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118.43	117.66	115.81	115.19	---	113.99	115.37	113.48	118.60	117.56	116.03	114.99
2	118.55	117.19	115.72	115.52	---	114.37	115.09	113.75	118.87	117.47	115.84	114.74
3	118.35	117.12	115.71	115.70	---	114.45	115.19	113.48	118.66	117.17	116.05	115.10
4	118.19	117.79	115.49	116.12	---	114.16	114.84	113.29	118.72	117.05	116.34	115.55
5	117.77	118.37	115.63	115.70	---	113.79	114.62	113.10	118.44	117.00	116.24	115.31
6	117.49	117.95	115.35	115.68	---	114.37	114.81	113.70	118.26	116.76	116.24	114.95
7	117.18	117.49	115.24	115.17	---	114.33	114.81	114.00	118.42	117.15	115.93	114.70
8	117.29	117.18	115.30	115.78	---	113.78	115.07	114.37	118.20	116.75	115.58	114.64
9	117.67	116.89	115.46	115.87	---	113.92	114.97	114.26	118.20	116.55	115.74	114.89
10	118.21	116.55	115.31	115.88	---	114.33	114.56	114.60	117.86	116.41	115.69	115.10
11	118.56	117.19	115.41	115.14	---	114.46	114.51	114.36	117.82	116.02	115.40	115.63
12	118.29	117.65	115.24	114.91	---	114.73	114.62	114.32	117.78	115.94	115.09	115.62
13	118.16	117.87	115.25	115.16	---	114.70	114.44	114.82	117.76	115.86	115.13	115.44
14	118.16	117.56	115.15	114.72	---	114.21	114.24	114.86	117.34	116.11	115.18	114.94
15	117.99	117.27	115.44	114.71	114.04	114.37	113.94	115.59	117.72	115.78	114.83	115.29
16	118.11	116.98	115.32	115.54	113.52	114.42	114.07	115.82	118.21	116.06	114.81	115.28
17	117.96	116.64	115.24	---	113.50	114.01	114.21	116.15	118.11	115.93	115.13	115.09
18	117.99	117.06	115.23	---	113.57	114.59	114.36	116.42	118.05	116.18	114.97	115.01
19	117.78	117.64	115.24	---	113.42	115.12	114.24	116.39	117.69	116.11	115.44	115.12
20	117.40	117.45	115.31	---	113.45	115.63	113.88	116.32	117.67	116.43	116.00	114.80
21	117.14	117.32	115.08	---	113.72	115.17	114.20	116.69	117.52	116.24	115.84	114.39
22	117.03	117.23	114.67	---	113.67	115.82	114.08	116.56	117.31	116.25	115.56	114.07
23	117.04	117.33	114.40	---	113.31	116.69	113.62	117.03	117.04	116.10	115.70	114.20
24	116.69	117.18	114.70	---	113.47	117.27	113.86	116.68	116.85	115.90	115.97	114.53
25	116.72	116.99	114.87	---	113.77	117.01	114.21	116.42	117.24	115.66	115.82	114.30
26	116.81	116.28	115.29	---	113.69	116.82	114.16	117.07	117.47	115.73	116.10	113.88
27	117.24	116.30	115.40	---	113.30	116.64	113.98	117.17	117.62	115.59	115.86	113.93
28	117.51	116.06	115.82	---	113.15	116.65	113.78	118.01	118.21	115.86	115.72	113.76
29	118.05	115.87	115.62	---	113.79	116.08	113.83	118.40	117.87	115.66	115.94	113.75
30	118.28	115.83	115.28	---	---	115.56	113.67	118.98	117.59	115.49	115.62	113.74
31	118.10	---	115.32	---	---	115.17	---	118.72	---	115.83	115.29	---

WTR YEAR 1980 HIGHEST 112.94 May 5, 1980 LOWEST 119.07 May 30, 1980



DUTCHESS COUNTY

414737073563301. Local number, Du 321.

LOCATION.--Lat 41°47'37", long 73°56'33", Hydrologic Unit 02020008, near Hyde Park.
Owner: U.S. National Park Service.

AQUIFER.--Confined aquifer in shale of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 128 ft (39.0 m), cased to unknown depth, open hole.

DATUM.--Altitude of land-surface datum is 170 ft (52 m), from topographic map. Measuring point: Top of extended casing, 3.10 ft (0.944 m) above land-surface datum.

REMARKS.--Water level responds to semidiurnal earth tides (approximately 0.05 ft or 0.015 m).

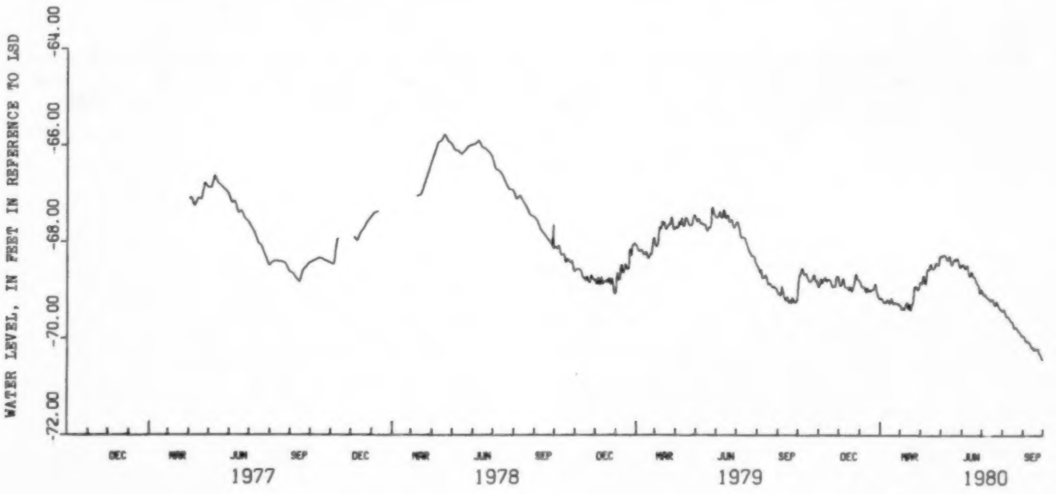
PERIOD OF RECORD.--September 1948 to April 1950, April 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.62 ft (20.00 m) below land-surface datum, June 22, 1953; lowest, 73.85 ft (22.51 m) below land-surface datum, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.91	68.95	68.80	68.82	69.18	69.32	68.83	68.28	68.49	68.99	69.44	69.93
2	68.75	68.91	68.85	68.84	69.16	69.32	68.85	68.30	68.47	69.05	69.43	69.94
3	68.71	68.81	68.92	68.88	69.18	69.40	68.86	68.31	68.45	69.07	69.39	69.97
4	68.66	68.76	68.89	68.94	69.20	69.38	68.79	68.29	68.46	69.09	69.41	70.03
5	68.66	68.82	68.87	68.93	69.23	69.36	68.69	68.28	68.51	69.10	69.48	70.06
6	68.56	68.86	68.80	68.94	69.26	69.37	68.73	68.26	68.56	69.07	69.51	70.05
7	68.55	68.83	68.75	68.93	69.25	69.41	68.82	68.28	68.55	69.11	69.55	70.04
8	68.57	68.79	68.77	68.93	69.26	69.38	68.88	68.30	68.49	69.14	69.54	70.06
9	68.63	68.77	68.89	68.98	69.26	69.30	68.83	68.32	68.48	69.15	69.53	70.08
10	68.68	68.73	68.94	69.04	69.21	69.30	68.62	68.36	68.49	69.17	69.55	70.08
11	68.69	68.75	68.95	69.05	69.19	69.24	68.56	68.38	68.57	69.17	69.58	70.10
12	68.68	68.80	68.94	68.94	69.19	69.28	68.57	68.37	68.67	69.17	69.59	70.13
13	68.65	68.82	68.94	69.00	69.25	69.39	68.57	68.34	68.72	69.20	69.62	70.18
14	68.69	68.78	68.95	69.02	69.28	69.28	68.58	68.29	68.71	69.22	69.65	70.19
15	68.74	68.79	68.99	69.00	69.28	69.29	68.48	68.36	68.65	69.19	69.65	70.17
16	68.78	68.78	68.99	69.01	69.20	69.39	68.45	68.42	68.61	69.19	69.65	70.21
17	68.81	68.78	68.92	69.02	69.15	69.42	68.52	68.48	68.66	69.18	69.72	70.24
18	68.82	68.80	68.93	69.01	69.21	69.30	68.54	68.48	68.71	69.21	69.77	70.19
19	68.84	68.84	68.97	68.98	69.28	69.27	68.57	68.42	68.73	69.27	69.78	70.22
20	68.82	68.89	69.03	68.99	69.29	69.28	68.56	68.39	68.72	69.30	69.76	70.24
21	68.80	68.92	69.01	68.98	69.27	69.19	68.53	68.38	68.73	69.32	69.76	70.22
22	68.78	68.94	68.95	68.97	69.28	68.95	68.52	68.36	68.79	69.25	69.78	70.21
23	68.75	68.92	68.90	68.90	69.25	68.92	68.45	68.38	68.83	69.23	69.80	70.20
24	68.69	68.92	68.84	68.87	69.26	68.96	68.43	68.36	68.86	69.25	69.82	70.26
25	68.68	68.93	68.72	68.90	69.27	68.92	68.45	68.33	68.87	69.30	69.85	70.32
26	68.74	68.84	68.66	68.99	69.28	68.93	68.47	68.35	68.88	69.33	69.85	70.31
27	68.81	68.74	68.68	69.08	69.29	68.97	68.49	68.39	68.95	69.36	69.86	70.34
28	68.82	68.71	68.74	69.12	69.28	69.00	68.47	68.44	69.06	69.40	69.89	70.38
29	68.80	68.70	68.78	69.15	69.29	68.97	68.34	68.50	69.05	69.40	69.93	70.43
30	68.86	68.73	68.78	69.17	---	68.88	68.29	68.53	68.97	69.39	69.95	70.43
31	68.92	---	68.79	69.18	---	68.83	---	68.53	---	69.42	69.94	---

WTR YEAR 1980 HIGHEST 68.20 May 4, 5, 6, 14, 1980 LOWEST 70.47 Sept. 30, 1980



DUTCHESS COUNTY

414128073475201. Local number, Du 1009.

LOCATION.--Lat 41°41'28", long 73°47'52", Hydrologic Unit 02020008, James Baird State Park, near Pleasant Valley. Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 28 ft (8.5 m) in July 1979 (previously reported as 27 ft or 8.2 m), cased to 25 ft (7.6 m), 1.25-in. (0.03-m) well point (60-gauze screen 25 ft or 7.6 m to 27 ft or 8.2 m).

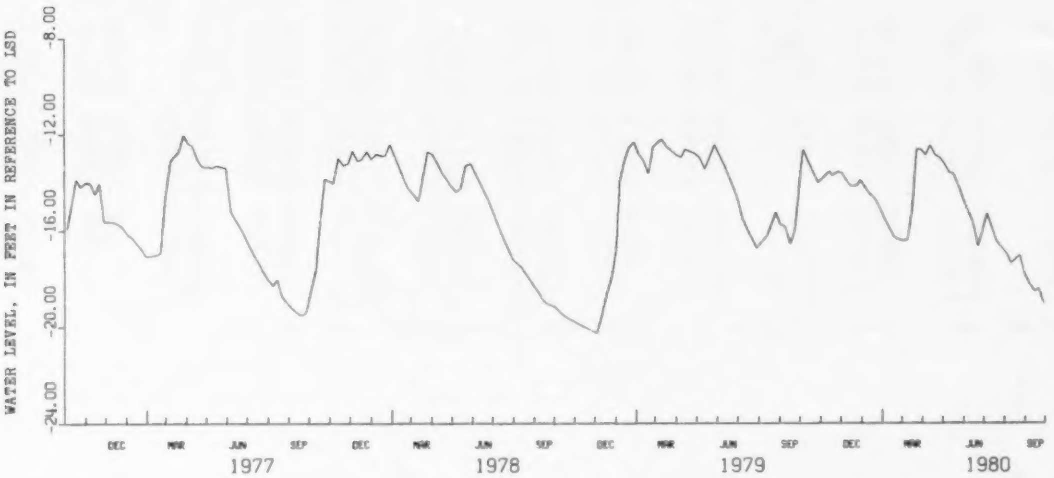
DATUM.--Altitude of land-surface datum is 330 ft (101 m), from topographic map. Measuring point: Top of casing, 2.10 ft (0.640 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1965 to April 1969, June 1971 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.92 ft (3.63 m) below land-surface datum, Sept. 14, 1971; lowest measured, 20.60 ft (6.28 m) below land-surface datum, Nov. 24, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1979	13.14	DEC 31, 1979	13.94	MAR 24, 1980	12.66	JUN 16, 1980	15.67
08	12.65	JAN 07, 1980	14.23	31	12.66	24	16.67
15	13.16	13	14.47	APR 07	12.89	JUL 07	15.33
29	14.04	21	14.68	14	12.49	21	16.46
NOV 14	13.60	28	15.02	21	12.89	AUG 06	17.02
16	13.58	FEB 04	15.48	28	13.02	11	17.38
19	13.73	11	15.89	MAY 05	13.26	25	17.05
28	13.58	19	16.29	12	13.60	SEP 01	17.86
DEC 03	13.62	25	16.39	19	13.70	09	18.27
11	13.97	MAR 03	16.45	26	14.20	15	18.54
17	14.18	10	16.43	JUN 02	14.76	22	18.45
26	14.16	17	15.16	09	15.18	29	19.04

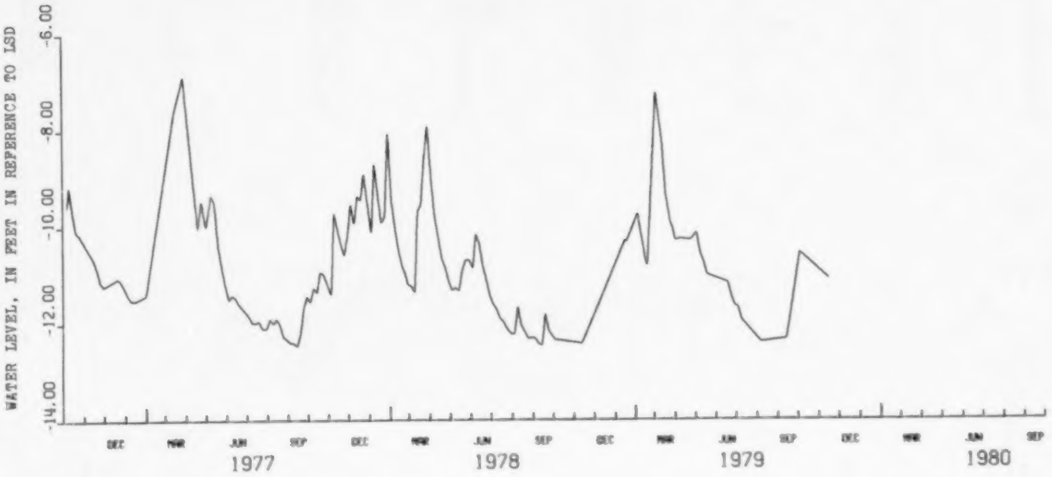


DUTCHESS COUNTY

414857073460501. Local number, Du 1010.
LOCATION.--Lat 41°48'57", long 73°46'05", Hydrologic Unit 02020008, near Hibernia.
Owner: Manuel Mastri.
AQUIFER.--Water-table aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 21 ft (6.4 m), cased to 19 ft (5.8 m), 1.25-in. (0.03-m) well point (60-gauze screen 19 ft or 5.8 m to 20 ft or 6.1 m).
DATUM.--Altitude of land-surface datum is 250 ft (76 m), from topographic map. Measuring point: Top of extended casing, 2.90 ft (0.883 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to November 1979 (discontinued). Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.88 ft (2.09 m) below land-surface datum, Mar. 30, 1977; lowest measured, 12.52 ft (3.82 m) below land-surface datum, Aug. 27, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1979 TO NOVEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1979	10.55	NOV 16, 1979	11.09

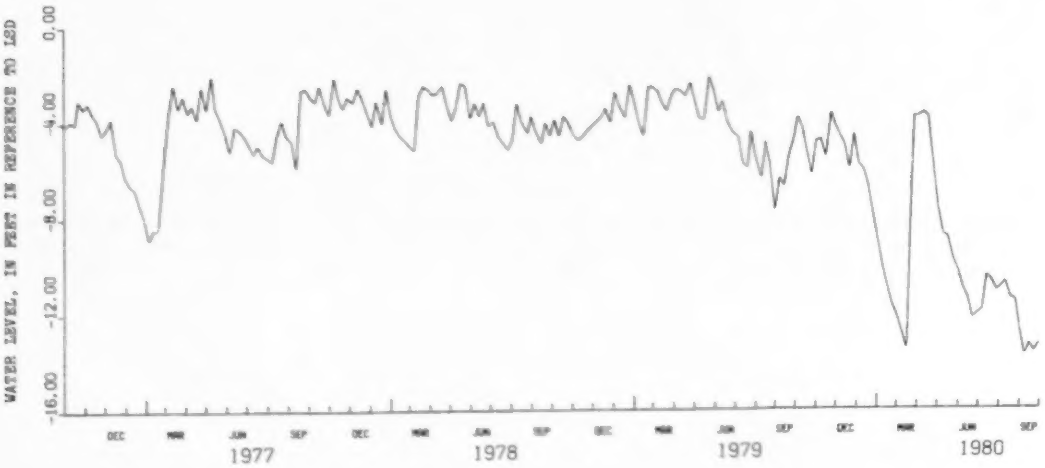


GREENE COUNTY

422319073482001. Local number, G 1.
LOCATION.--Lat 42°23'19", long 73°48'20", Hydrologic Unit 02020006, near West Coxsackie.
Owner: Harry Andrews.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in. (0.91 m), depth 18 ft (5.5 m) in August 1979 (previously reported as 19 ft or 5.8 m), tile-lined to 2 ft (0.6 m), stone-lined to 19 ft (5.8 m).
DATUM.--Altitude of land-surface datum is 130 ft (40 m), from topographic map. Measuring point: Chiseled square on top of inner step on curb, 0.18 ft (0.055 m) below land-surface datum.
PERIOD OF RECORD.--December 1945 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 1.07 ft (0.33 m) below land-surface datum, Mar. 15, 1962; lowest measured 15.56 ft (4.74 m) below land-surface datum, Feb. 27, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1979	4.75	JAN 07, 1980	5.85	APR 14, 1980	3.72	JUL 22, 1980	10.69
07	3.92	14	6.08	21	3.90	30	11.13
14	4.31	21	6.70	28	5.96	AUG 05	10.97
21	5.37	28	7.88	MAY 05	7.69	12	10.74
28	6.24	FEB 04	9.01	12	8.76	20	11.43
NOV 04	4.87	11	10.14	19	8.88	27	11.50
11	4.81	18	11.01	27	9.83	SEP 02	12.73
18	5.52	25	11.69	JUN 03	10.28	09	13.76
27	3.73	MAR 03	12.18	10	11.01	16	13.34
DEC 02	4.14	10	12.85	17	11.44	23	13.65
09	4.60	17	13.49	24	12.24	30	13.32
17	5.01	25	7.34	JUL 01	12.06		
24	6.01	31	3.85	08	11.90		
31	4.62	APR 07	3.85	15	10.48		

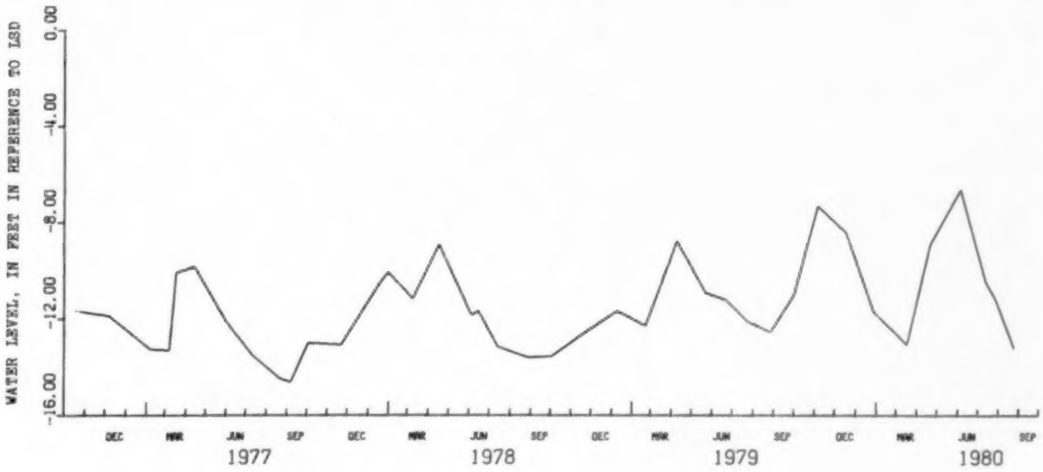


HAMILTON COUNTY

432832074122201. Local number, H 3.
LOCATION.--Lat 43°28'32", long 74°12'22", Hydrologic Unit 02020002, near Griffin.
Owner: F. B. Girard.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 16 ft (4.9 m), filled in from original depth of 19 ft (5.8 m), cased to 16 ft (4.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 16 ft or 4.9 m to 19 ft or 5.8 m, damaged during well installation).
DATUM.--Altitude of land-surface datum is 1,290 ft (393 m), from topographic map. Measuring point: Top of casing, 2.30 ft (0.701 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.63 ft (2.02 m) below land-surface datum, June 6, 1980; lowest measured, 15.44 ft (4.71 m) below land-surface datum, Oct. 21, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1979	11.02	JAN 28, 1980	11.70	JUN 06, 1980	6.63	AUG 25, 1980	13.21
NOV 06	7.33	MAR 17	13.06	JUL 14	10.48		
DEC 18	8.45	APR 21	8.92	28	11.18		

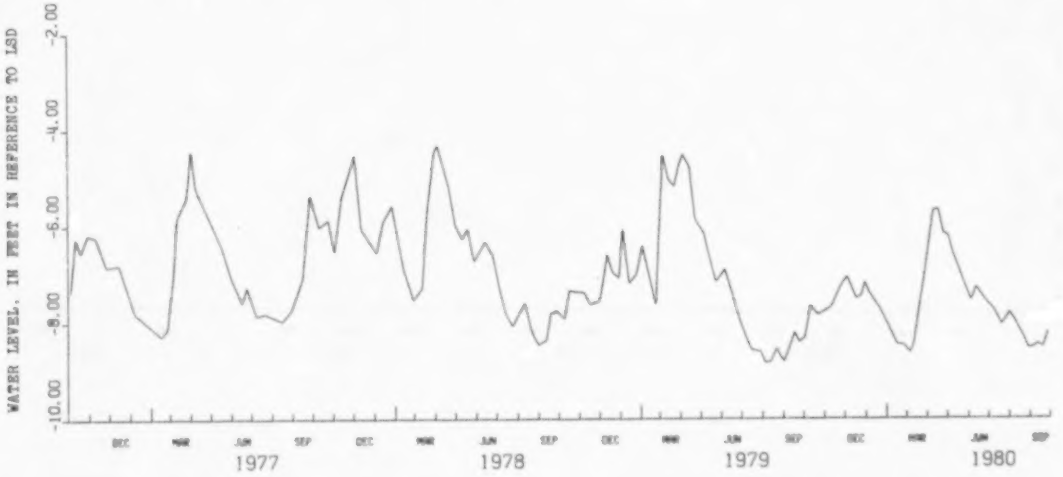


MONTGOMERY COUNTY

430141074423501. Local number, Mt 1.
LOCATION.--Lat 43°01'41", long 74°42'35", Hydrologic Unit 02020004, near St. Johnsville.
Owner: Marion G. Groff.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 24 in. (0.61 m), depth 12 ft (3.7 m), stone-lined.
DATUM.--Altitude of land-surface datum is 710 ft (216 m), from topographic map. Measuring point: Top edge of limestone slab at northeast corner of well opening, at land-surface datum.
PERIOD OF RECORD.--October 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.74 ft (1.14 m) below land-surface datum, Apr. 10, 1971; lowest measured 9.99 ft (3.04 m) below land-surface datum, Aug. 28, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1979	8.32	JAN 23, 1980	7.74	APR 26, 1980	6.16	AUG 09, 1980	7.96
11	7.67	FEB 06	8.16	MAY 04	6.23	16	8.16
23	7.85	16	8.46	10	6.56	22	8.30
NOV 06	7.73	26	8.48	20	6.93	29	8.54
12	7.67	MAR 07	8.63	26	7.18	SEP 06	8.53
27	7.21	12	8.42	JUN 06	7.55	12	8.46
DEC 05	7.07	22	7.54	13	7.28	20	8.52
19	7.52	29	6.92	28	7.57	27	8.23
26	7.44	APR 04	6.37	JUL 10	7.76		
31	7.18	11	5.69	21	8.06		
JAN 07, 1980	7.41	19	5.68	AUG 02	7.81		



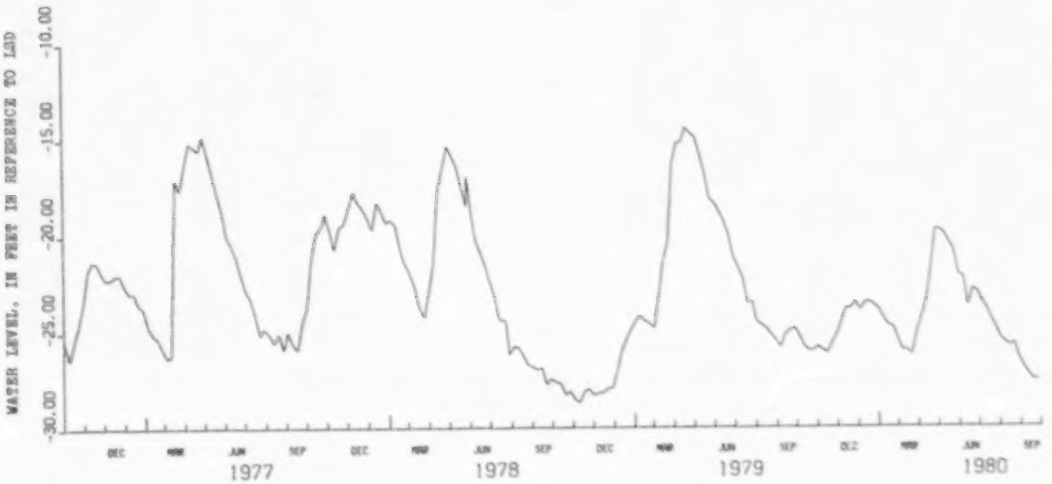
GROUND-WATER LEVELS

ONEIDA COUNTY

433112075091501. Local number, Oe 151.
LOCATION.--Lat 43°31'12", long 75°09'15", Hydrologic Unit 04150101, at Woodgate.
Owner: Henry Rubyor.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in. (0.91 m), depth 31 ft (9.4 m), stone-lined.
DATUM.--Land-surface datum is 1,484.94 ft (452.609 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of 2-ft (0.6-m) square concrete well cover at midpoint of south side of rectangular opening, 1.00 ft (0.305 m) above land-surface datum.
PERIOD OF RECORD.--July 1926 to August 1945, October 1948 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.43 ft (3.48 m) below land-surface datum, Apr. 3, 1976; lowest measured 30.31 ft (9.24 m) below land-surface datum, Feb. 25, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1979	25.25	JAN 05, 1980	23.92	APR 05, 1980	24.39	JUL 05, 1980	23.52
13	25.75	12	23.54	12	23.55	12	23.88
20	26.00	19	23.50	19	21.89	19	24.40
27	26.00	26	23.68	26	19.75	26	24.85
NOV 03	25.80	FEB 02	23.89	MAY 03	19.78	AUG 02	25.43
10	26.00	09	24.35	10	19.98	09	25.66
17	26.15	16	24.72	17	20.43	16	25.81
24	25.58	23	24.81	24	20.86	23	25.70
DEC 01	25.15	MAR 01	25.40	31	22.10	30	26.46
08	24.45	08	26.00	JUN 07	22.23	SEP 06	26.88
15	23.82	15	26.00	14	23.71	13	27.27
22	23.82	22	26.22	21	22.85	20	27.57
29	23.51	29	25.05	28	23.00	27	27.56



ONEIDA COUNTY

433012075134202. Local number, Oe 766.

LOCATION.--Lat 43°30'12", long 75°13'42", Hydrologic Unit 04150101, near Hawkinsville.
   Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Driven-washed observation well, diameter 6 in. (0.15 m), depth 31 ft (9.4 m), filled in from original depth of 33 ft (10.1 m), cased to 33 ft (10.1 m), open end.

DATUM.--Land-surface datum is 1,190.22 ft (362.779 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of extended casing, 2.63 ft (0.802 m) above land-surface datum.

REMARKS.--Well was driven-washed November 1968 as a replacement for 433012075134201 (local number Oe 765), located 15 ft (4.6 m) east, which has a period of record from November 1965 to November 1968 (unpublished).

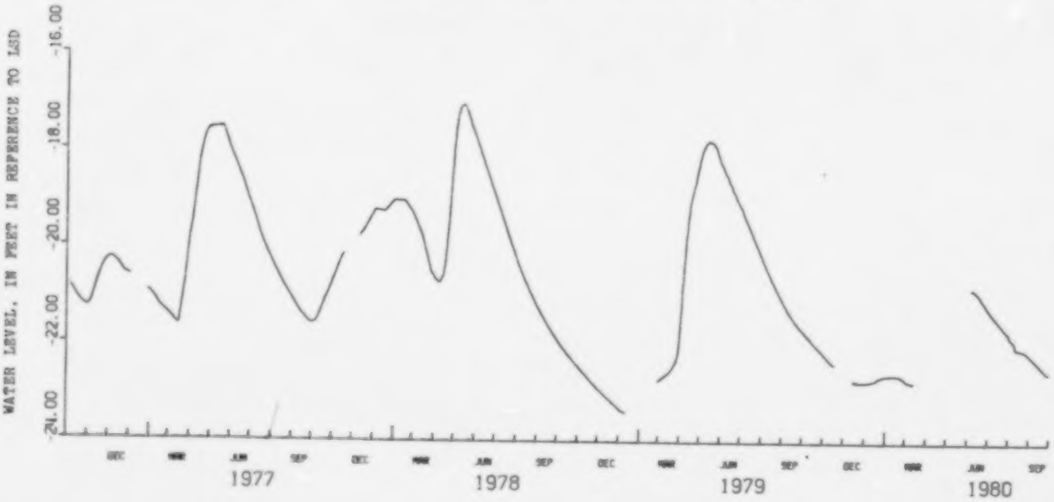
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1968 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.87 ft (4.53 m) below land-surface datum, May 21, 1972; lowest, 23.49 ft (7.16 m) below land-surface datum, Apr. 10, 11, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.69	22.17	---	22.75	22.61	22.70			---	21.22	21.73	22.16
2	21.70	22.18	---	22.75	22.61	22.70			---	21.24	21.78	22.18
3	21.72	22.19	---	22.75	22.61	22.71			---	21.25	21.81	22.20
4	21.74	22.21	---	22.75	22.61	22.72			---	21.27	21.82	22.21
5	21.75	22.23	---	22.74	22.60	22.73			20.83	21.28	21.84	22.22
6	21.76	22.24	---	22.74	22.60	22.74			20.83	21.31	21.86	22.23
7	21.78	22.26	---	22.74	22.60	22.74			20.82	21.33	21.87	22.25
8	21.80	22.27	---	22.74	22.60	22.74			20.81	21.34	21.88	22.26
9	21.81	22.29	---	22.73	22.60	22.75			20.82	21.36	21.89	22.27
10	21.83	22.30	---	22.73	22.60	22.75			20.82	21.37	21.93	22.29
11	21.84	22.32	---	22.73	22.60	22.75			20.84	21.39	22.00	22.30
12	21.85	22.33	---	22.72	22.60	22.77			20.85	21.41	22.04	22.32
13	21.88	22.34	---	22.72	22.60	22.77			20.87	21.43	---	22.33
14	21.90	22.36	---	22.72	22.60	---			20.87	21.45	---	22.34
15	21.91	22.37	---	22.72	22.60	---			20.88	21.46	---	22.36
16	21.93	---	---	22.71	22.60	---			20.90	21.47	---	22.37
17	21.95	---	---	22.70	22.60	---			20.92	21.49	---	22.38
18	21.96	---	22.74	22.69	22.60	---			20.94	21.51	---	22.41
19	21.97	---	22.74	22.68	22.60	---			20.95	21.53	---	22.42
20	21.99	---	22.74	22.68	22.61	---			20.96	21.54	---	22.43
21	22.01	---	22.75	22.66	22.61	---			21.00	21.56	---	22.45
22	22.02	---	22.75	22.65	22.61	---			21.03	21.57	---	22.46
23	22.03	---	22.75	22.64	22.62	---			21.05	21.59	---	22.47
24	22.04	---	22.75	22.64	22.62	---			21.06	21.61	---	22.49
25	22.06	---	22.75	22.64	22.64	---			21.08	21.63	22.08	22.51
26	22.08	---	22.75	22.63	22.65	---			21.10	21.65	22.09	22.52
27	22.09	---	22.75	22.63	22.66	---			21.12	21.66	22.10	22.53
28	22.10	---	22.75	22.62	22.66	---			21.15	21.67	22.12	22.54
29	22.11	---	22.75	22.62	22.68	---			21.16	21.68	22.13	22.54
30	22.14	---	22.75	22.62	---	---			21.18	21.70	22.14	22.55
31	22.15	---	22.75	22.61	---	---			---	21.72	22.15	---

WTR YEAR 1980   HIGHEST 20.81 Jun. 8, 9, 1980   LOWEST 22.77 Mar. 12, 13, 1980



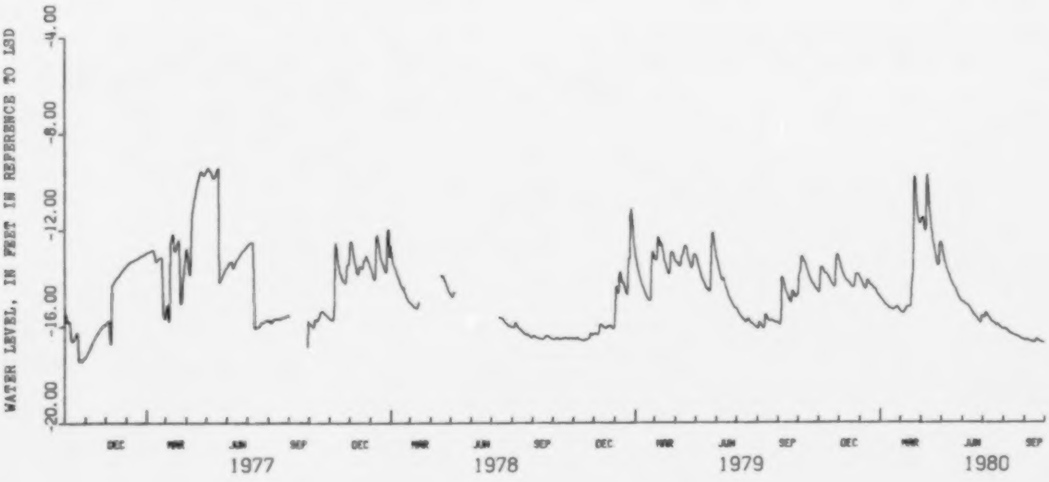
ORANGE COUNTY

411933074150801. Local number, O 104.
LOCATION.--Lat 41°19'33", long 74°15'08", Hydrologic Unit 02020008, near Chester.
Owner: Palisades Interstate Park Commission.
AQUIFER.--Water-table aquifer in limestone of Devonian age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 70 ft (21.3 m) in October 1979 (previously reported as 98 ft or 29.9 m), cased to 73 ft (22.3 m), open end.
DATUM.--Altitude of land-surface datum is 445 ft (136 m), from topographic map. Measuring point: Top of extended casing, 4.49 ft (1.369 m) above land-surface datum.
REMARKS.--Water-level fluctuations show hydraulic contact with Seeley Brook, 500 ft (152 m) west.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for September 1964 to June 1974, February 1975 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.59 ft (2.92 m) below land-surface datum, Apr. 5, 1970; lowest, 17.50 ft (5.33 m) below land-surface datum, Oct. 26, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.65	14.61	13.20	13.95	---	15.37	11.73	12.51	14.98	15.59	16.13	16.58
2	14.09	14.63	13.29	14.00	---	15.40	11.58	12.58	15.00	15.65	16.15	16.60
3	13.93	14.14	13.35	14.07	---	15.43	11.58	12.71	15.00	15.59	16.12	16.58
4	13.74	13.60	13.48	14.15	---	15.46	11.48	12.86	15.00	15.62	16.10	16.58
5	13.68	13.55	13.60	14.19	---	15.47	11.52	13.01	15.06	15.66	16.13	16.59
6	13.22	13.54	13.70	14.27	---	15.47	11.74	13.16	15.11	15.45	16.16	16.57
7	13.09	13.57	13.75	14.32	---	15.46	11.93	13.31	15.12	15.46	16.19	16.59
8	13.13	13.65	13.85	14.38	---	15.39	12.11	13.42	15.11	15.51	16.22	16.61
9	13.24	13.74	13.93	14.43	15.12	15.30	11.81	13.52	15.12	15.56	16.25	16.62
10	13.32	13.78	13.99	14.49	15.13	15.32	10.23	13.64	15.14	15.60	16.28	16.63
11	13.32	13.82	14.03	14.49	15.17	15.20	9.70	13.73	15.18	15.64	16.30	16.64
12	13.37	13.80	14.08	14.10	15.18	15.20	10.09	13.78	15.22	15.68	16.31	16.66
13	13.45	13.82	14.12	14.09	15.21	15.22	10.64	13.83	15.27	15.73	16.33	16.67
14	13.56	13.86	14.12	14.15	15.26	15.19	11.08	13.92	15.30	15.78	16.34	16.67
15	13.66	13.91	14.18	14.19	15.28	15.19	11.28	14.02	15.34	15.82	16.34	16.68
16	13.75	13.96	14.21	14.23	15.26	15.21	11.62	14.11	15.40	15.85	16.36	16.67
17	13.84	14.01	14.20	14.28	15.28	15.21	11.93	14.19	15.45	15.86	16.38	16.68
18	13.92	14.07	14.25	14.32	15.31	14.47	12.16	14.25	15.49	15.87	16.40	16.57
19	14.00	14.14	14.31	14.32	15.32	14.08	12.36	14.30	15.54	15.89	16.41	16.55
20	14.07	14.18	14.36	14.34	15.32	14.00	12.54	14.37	15.56	15.92	16.42	16.57
21	14.14	14.24	14.39	14.39	15.33	13.54	12.71	14.41	15.60	15.96	16.42	16.58
22	14.21	14.28	14.40	14.43	15.29	11.18	12.87	14.42	15.64	15.98	16.43	16.60
23	14.27	14.32	14.41	14.44	15.29	9.77	13.01	14.48	15.67	15.93	16.44	16.61
24	14.25	14.37	14.39	14.46	15.25	9.94	13.16	14.55	15.70	15.92	16.47	16.65
25	14.31	14.41	14.14	14.46	15.20	10.32	13.30	14.62	15.74	15.97	16.49	16.67
26	14.38	14.09	13.87	14.53	15.20	10.77	13.42	14.69	15.79	16.00	16.51	16.66
27	14.45	13.31	13.84	14.64	15.23	11.16	13.53	14.76	15.82	16.03	16.53	16.68
28	14.46	13.14	13.84	14.67	15.27	11.45	13.45	14.82	15.86	16.07	16.54	16.69
29	14.45	13.03	13.84	---	15.33	11.59	12.73	14.88	15.88	16.09	16.55	16.69
30	14.51	13.09	13.85	---	---	11.63	12.55	14.93	15.59	16.10	16.56	16.69
31	14.57	---	13.91	---	---	11.75	---	14.97	---	16.12	16.57	---

WTR YEAR 1980 HIGHEST 9.65 Apr. 11, 1980 LOWEST 16.69 Sept. 17, 27, 28-29, 30, 1980



PUTNAM COUNTY

412450073413101. Local number, P 609.

LOCATION.--Lat 41°24'50", long 73°41'31", Hydrologic Unit 02030101, near Carmel.
Owner: New York City Board of Water Supply.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth 17 ft (5.2 m), stone-lined.

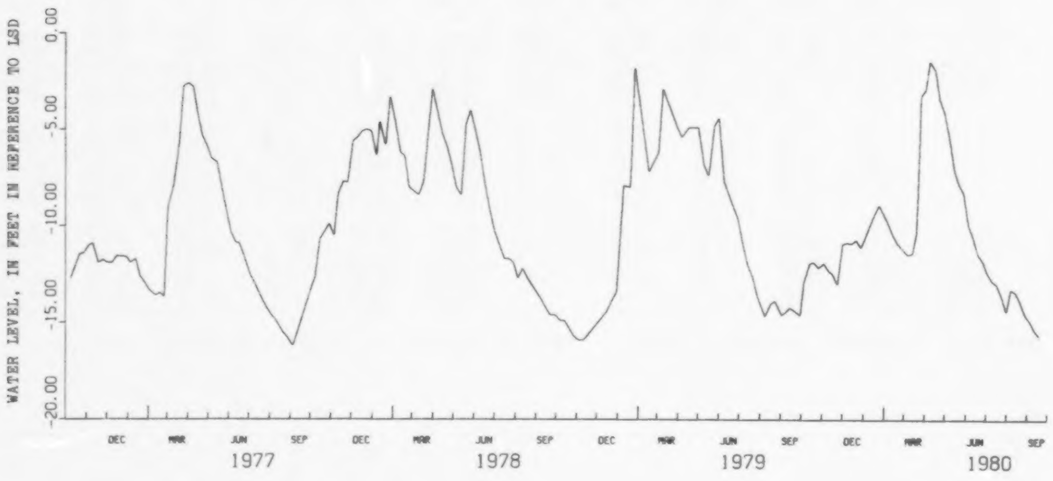
DATUM.--Altitude of land-surface datum is 540 ft (165 m), from topographic map. Measuring point: Top (north side) of 3-in. (0.08-m) coupling set in concrete well cover, at land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for January 1935 to September 1945, September 1950 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.0 ft (0.30 m) below land-surface datum, Oct. 19, 1955; lowest measured, dry Nov. 1, 30, 1935, Jan. 7, 1936, Sept. 1, 1939, several days in 1953, 1957, 1964, 1966, 1978, Sept. 25, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1979	12.94	DEC 29, 1979	11.10	APR 04, 1980	2.90	JUL 04, 1980	12.40
06	12.75	JAN 05, 1980	10.50	10	1.45	11	12.80
14	11.90	11	10.00	18	1.90	18	13.00
20	11.85	18	9.40	25	3.40	25	13.60
27	12.15	25	8.90	MAY 02	4.10	AUG 01	14.40
NOV 04	11.90	FEB 01	9.40	09	5.40	08	13.25
11	12.30	08	9.90	16	7.10	15	13.40
17	12.45	15	10.45	23	7.85	22	13.90
24	13.00	22	10.90	30	8.25	29	14.55
DEC 02	10.90	MAR 07	11.45	JUN 06	9.90	SEP 05	14.90
09	10.85	14	11.40	13	10.55	12	15.35
15	10.90	21	10.30	20	11.45	19	15.65
22	10.70	28	3.25	27	11.80	25	DRY

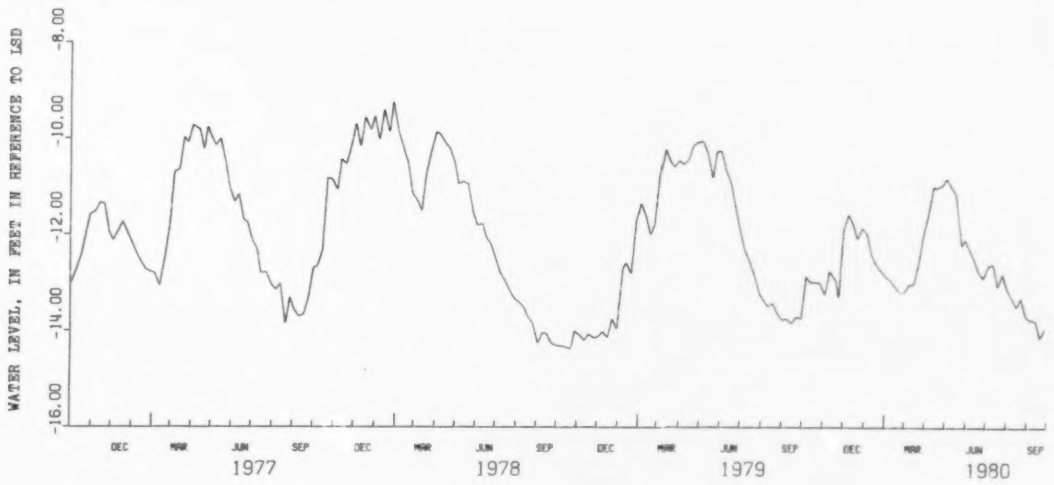


RENSSELAER COUNTY

423834073391001. Local number, Re 700.
LOCATION.--Lat 42°38'34", long 73°39'10", Hydrologic Unit 02020006, near Defreestville.
Owner: William P. Hofmann.
AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic well, diameter 4 ft (1.2 m), depth 16 ft (4.9 m), stone-lined.
DATUM.--Altitude of land-surface datum is 405 ft (123 m), from topographic map. Measuring point: Top edge of concrete curbing at midpoint of north side of rectangular opening, 2.00 ft (0.609 m) above land-surface datum.
PERIOD OF RECORD.--September 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 8.92 ft (2.72 m) below land-surface datum, Apr. 4, 1970; lowest measured 15.49 ft (4.72 m) below land-surface datum, Oct. 3, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1979	12.87	JAN 12, 1980	12.43	APR 13, 1980	11.00	JUL 12, 1980	12.60
13	12.98	20	12.64	19	11.02	19	13.07
27	13.00	26	12.74	26	10.96	26	12.81
NOV 03	13.24	FEB 02	12.85	MAY 03	10.83	AUG 02	13.12
10	12.76	09	12.94	10	10.99	09	13.32
20	12.96	16	13.07	17	11.15	16	13.48
24	13.30	23	13.20	26	12.23	23	13.31
DEC 01	11.89	MAR 01	13.19	31	12.09	30	13.68
08	11.58	08	13.03	JUN 07	12.32	SEP 06	13.76
15	11.77	15	13.02	14	12.50	13	13.77
22	12.08	22	12.61	20	12.76	20	14.13
29	11.86	29	12.00	27	12.89	27	13.94
JAN 05, 1980	11.97	APR 05	11.64	JUL 05	12.64		



RENSSELAER COUNTY

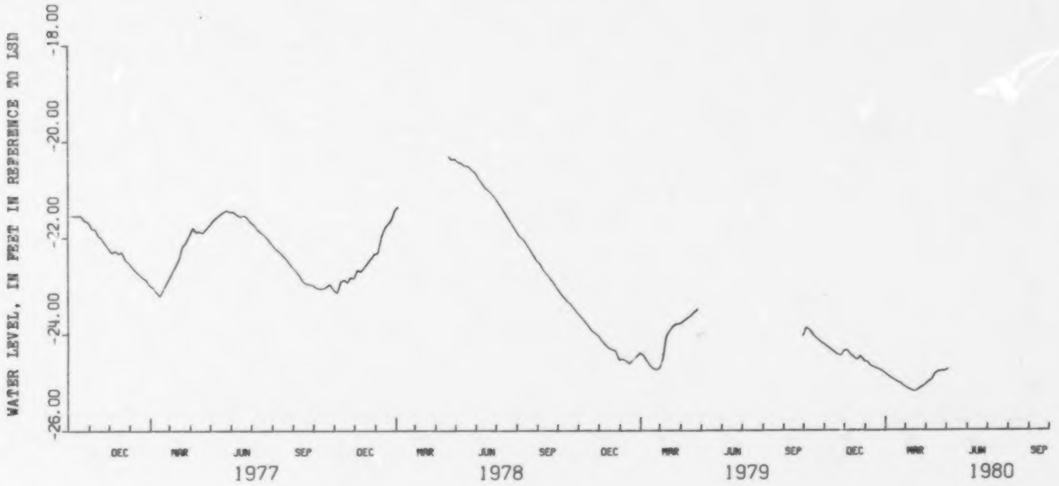
423532073423701. Local number, Re 701.
LOCATION.--Lat 42°35'32", long 73°42'37", Hydrologic Unit 02020006, near East Greenbush.
Owner: Town of East Greenbush.
AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in. (0.20 m) to 12 in. (0.30 m), depth 96 ft (29.3 m), casing slotted 82 ft (25.0 m) to 96 ft (29.3 m).
DATUM.--Altitude of land-surface datum is 255 ft (78 m), from topographic map. Measuring point: Top of flange, 3.35 ft (1.021 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to May 1980 (discontinued). Unpublished record for March 1961 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.72 ft (6.01 m) below land-surface datum, May 25, 1976; lowest, 31.59 ft (9.63 m) below land-surface datum, Mar. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1979 TO MAY 1980
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
OCT 05, 1979	23.87		DEC 10, 1979	24.43		JAN 25, 1980	24.76		MAR 25, 1980	25.11
10	23.92		15	24.49		31	24.81		31	25.06
15	24.02		20	24.54		FEB 05	24.87		APR 05	24.99
20	24.09		25	24.46		13	24.95	S	10	24.95
23	24.13	S	31	24.57		25	25.04	E	15	24.82
NOV 20	24.42	S	JAN 05, 1980	24.59		29	25.09		20	24.78
25	24.46		10	24.67		MAR 05	25.13	E	25	24.77
30	24.35		15	24.70		15	25.20		30	24.77
DEC 05	24.34		20	24.73		20	25.16		MAY 05	24.73

E Estimated.

S Steel tape measurement.

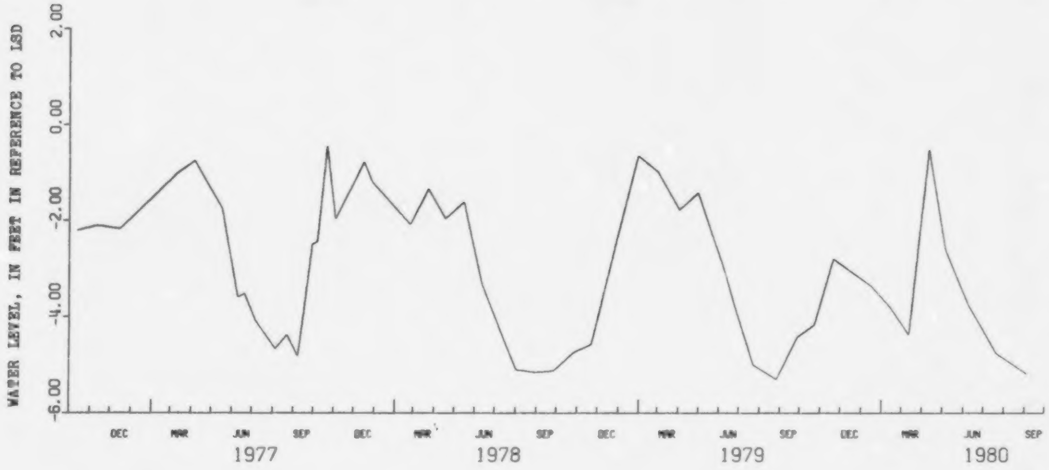


RENSSELAER COUNTY

423225073430501. Local number, Re 702.
LOCATION.--Lat 42°32'25", long 73°43'05", Hydrologic Unit 02020006, near Brookview.
Owner: Nicholas J. Bult.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 16 ft (4.9 m), cased to 13 ft (4.0 m), 1.5-in. (0.04-m) well point (60-gauze screen 13 ft or 4.0 m to 16 ft or 4.9 m).
DATUM.--Altitude of land-surface datum is 175 ft (53 m), from topographic map. Measuring point: Top of casing, 3.30 ft (1.006 m) above land-surface datum.
PERIOD OF RECORD.--October 1977 to current year. Unpublished record for November 1965 to September 1977 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft (0.01 m) above land-surface datum, November 29, 1972; lowest measured, 6.42 ft (1.96 m) below land-surface datum, September 22, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 1979	4.17	FEB 13, 1980	3.80	MAY 06, 1980	2.62	SEP 04, 1980	5.18
NOV 20	2.80	MAR 12	4.37	JUN 09	3.75		
JAN 16, 1980	3.36	APR 11	0.52	JUL 21	4.76		



ROCKLAND COUNTY

411802073593001. Local number, Ro 18.

LOCATION.--Lat 41°18'02", long 73°59'30", Hydrologic Unit 02030101, in Bear Mountain State Park near Lemon Road and Seven Lakes Drive.

Owner: Palisades Interstate Park Commission.

AQUIFER.--Confined aquifer in Storm King Granite of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 60 ft (18.3 m), cased to 53 ft (16.2 m), open hole.

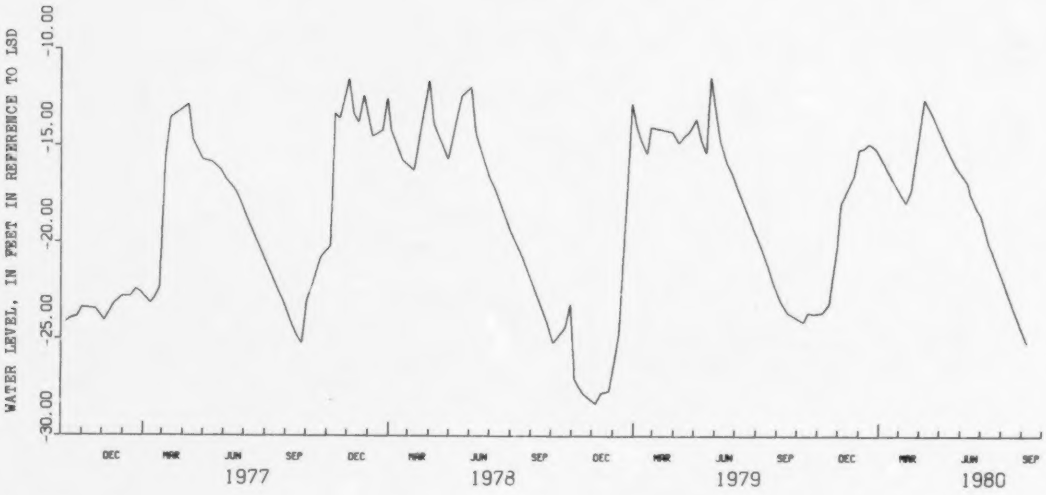
DATUM.--Altitude of land-surface datum is 390 ft (119 m), from topographic map. Measuring point: Top of extended casing, 3.65 ft (1.112 m) above land-surface datum.

PERIOD OF RECORD.--July 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 10.55 ft (3.22 m) below land-surface datum, Mar. 3, 1961; lowest measured 28.32 ft (8.63 m) below land-surface datum, Dec. 7, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACF DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11, 1979	24.13	JAN 02, 1980	15.20	MAR 20, 1980	17.27	JUL 02, 1980	18.63
18	23.63	09	15.14	APR 09	12.62	14	20.10
26	23.70	17	14.90	21	13.40	18	20.42
NOV 08	23.63	27	15.14	MAY 13	15.20	AUG 17	23.23
18	23.17	FEB 08	15.90	27	16.12	SEP 08	25.21
30	20.22	21	16.75	JUN 12	16.93		
DEC 06	17.99	MAR 06	17.60	16	17.50		
26	16.52	12	17.95	26	18.28		



ST. LAWRENCE COUNTY

444904074455201. Local number, St 40.

LOCATION.--Lat 44°49'04", long 74°45'52", Hydrologic Unit 04150306, near Brasher Falls.
Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in (0.91 m), depth 12 ft (3.7 m), concrete cased to 12 ft (3.7 m), open end.

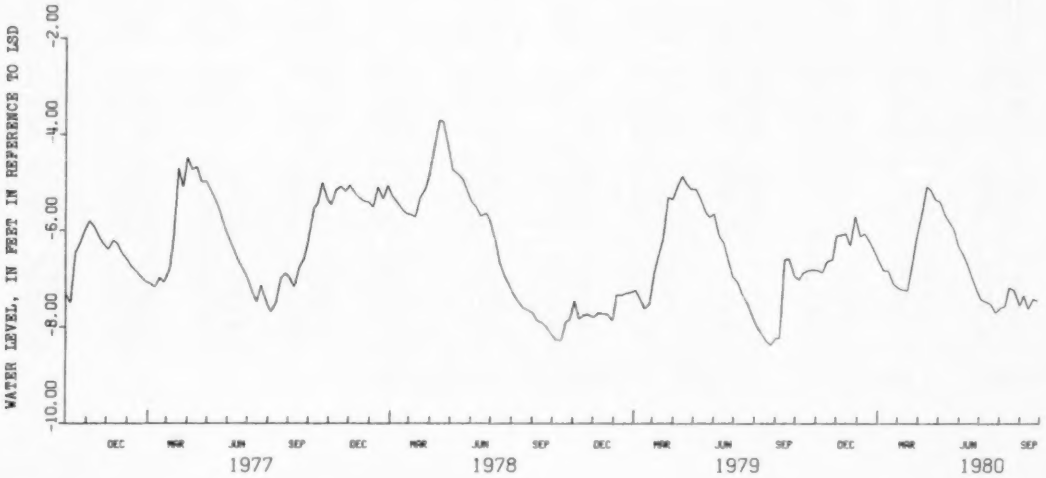
DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Chisled mark on top edge of 6-in. (0.15-m) by 8-in. (0.20-m) opening of concrete well cover, 0.70 ft (0.213 m) above land-surface datum.

PERIOD OF RECORD.--May 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.24 ft (0.99 m) below land-surface datum, Apr. 21, 1971; lowest measured 9.38 ft (2.86 m) below land-surface datum, Oct. 24, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1979	7.02	JAN 06, 1980	6.12	APR 06, 1980	5.65	JUL 04, 1980	7.42
13	6.87	12	6.06	13	5.08	12	7.48
20	6.82	19	6.22	19	5.15	19	7.52
27	6.81	26	6.39	27	5.36	26	7.70
NOV 03	6.82	FEB 03	6.66	MAY 03	5.40	AUG 02	7.60
10	6.87	09	6.82	11	5.68	09	7.56
17	6.64	17	6.84	17	5.81	15	7.18
25	6.60	24	7.10	24	5.96	23	7.23
DEC 01	6.11	MAR 02	7.19	31	6.32	31	7.55
08	6.09	09	7.23	JUN 07	6.49	SEP 06	7.34
15	6.06	16	7.24	14	6.70	13	7.62
22	6.31	24	6.59	21	6.98	20	7.42
29	5.70	29	6.15	28	7.24	27	7.45



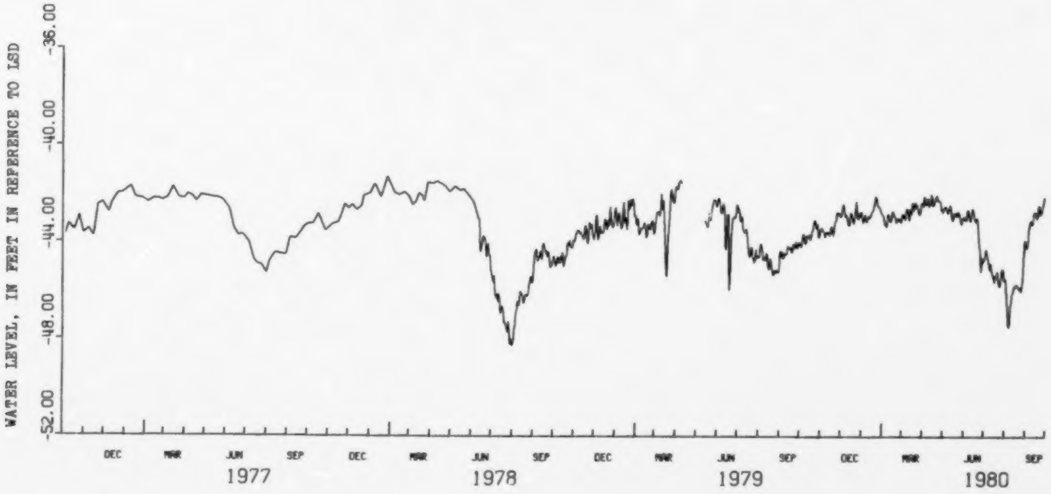
SARATOGA COUNTY

430327073475401. Local number, Sa 529.
LOCATION.--Lat 43°03'27", long 73°47'54", Hydrologic Unit 02020003, at Saratoga Springs.
Owner: Saratoga Springs Authority, New York State.
AQUIFER.--Confined aquifer in dolomite of Ordovician age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 304 ft (92.6 m), cased to 189 ft (57.6 m), open hole.
DATUM.--Altitude of land-surface datum is 305 ft (93 m), from topographic map. Measuring point: Top of casing, 3.38 ft (1.028 m) above land-surface datum.
REMARKS.--Water level affected by earthquakes and distant pumping.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for May 1949 to November 1961, August 1964 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 41.06 ft (12.52 m) below land-surface datum, Apr. 9, 1979; lowest, 56.20 ft (17.13 m) below land-surface datum, July 29, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.98	43.52	42.92	42.86	42.80	43.18	42.39	42.71	42.99	44.81	45.56	43.90
2	44.06	43.49	42.91	42.73	42.86	42.91	42.44	42.77	42.96	44.73	45.57	43.96
3	44.08	43.40	42.92	42.95	42.89	42.81	42.53	42.63	42.93	44.69	45.49	44.20
4	44.18	43.39	42.63	43.20	42.96	42.91	42.14	42.61	42.94	44.66	45.71	44.25
5	44.04	43.55	42.53	43.00	43.19	42.83	42.09	42.55	43.10	44.29	46.47	44.10
6	43.82	43.53	42.41	42.99	43.29	43.00	42.36	42.50	43.11	44.33	46.88	43.80
7	43.64	43.54	42.62	42.85	43.29	43.07	42.45	42.55	42.89	44.57	47.35	43.47
8	43.68	43.64	42.81	43.11	43.37	42.77	42.39	42.63	42.65	44.59	47.50	43.32
9	43.77	43.79	42.92	43.15	43.15	42.59	42.20	42.76	42.68	44.77	47.00	43.13
10	44.03	43.62	42.86	43.14	42.83	42.65	42.17	42.81	42.76	44.91	46.63	43.10
11	44.04	43.56	42.90	42.91	42.82	42.65	42.50	42.66	43.02	45.13	46.47	43.15
12	43.87	43.61	43.03	42.90	42.87	42.99	42.49	42.60	43.13	44.87	46.17	43.27
13	43.73	43.59	43.25	43.02	43.12	43.09	42.37	42.45	43.10	44.95	46.13	43.22
14	43.77	---	43.30	42.86	43.11	42.61	42.40	42.58	42.87	45.23	46.03	42.85
15	43.68	43.71	43.27	42.90	43.14	42.77	42.00	42.84	42.61	45.30	45.87	42.73
16	43.66	43.69	42.86	42.90	42.79	42.86	42.16	43.06	42.62	45.42	45.80	42.78
17	43.84	43.47	42.76	42.72	42.70	42.54	42.48	43.11	42.79	45.40	45.84	42.74
18	43.90	43.33	42.85	42.70	42.77	42.34	42.48	42.86	43.00	45.64	45.80	42.90
19	43.74	43.47	42.93	42.67	42.88	42.61	42.40	42.78	43.07	45.41	45.73	43.02
20	43.56	43.60	43.08	42.56	42.91	42.71	42.22	42.82	43.15	45.35	45.77	42.88
21	43.46	43.72	43.22	42.42	42.92	42.44	42.17	42.79	43.15	45.34	45.77	42.62
22	43.38	43.46	43.09	42.28	43.18	42.3[illegible]	42.21	42.83	42.99	45.18	45.82	42.47
23	43.20	43.20	42.84	42.08	43.18	42.[illegible]4	42.05	42.92	43.15	45.28	45.93	42.52
24	43.07	43.12	42.66	42.18	43.04	42.45	42.21	42.80	43.39	45.59	45.87	42.83
25	43.19	43.07	42.31	42.32	42.97	42.42	42.28	42.71	43.94	45.82	45.87	42.85
26	43.37	42.77	42.60	42.49	43.11	42.57	42.26	42.81	44.14	45.76	46.02	42.64
27	43.43	42.91	42.93	42.55	43.03	42.79	42.26	42.91	44.58	45.52	45.89	42.61
28	43.21	42.81	43.05	42.50	43.00	42.87	42.31	43.01	45.20	45.31	45.77	42.45
29	43.39	42.76	42.98	42.56	43.15	42.80	42.41	43.18	44.90	45.13	45.27	42.37
30	43.79	42.81	42.76	42.69	---	42.53	42.58	43.24	44.65	45.08	44.73	42.13
31	43.79	---	42.91	42.74	---	42.38	---	43.10	---	45.20	44.20	---

WTR YEAR 1980 HIGHEST 41.91 Apr. 15, 1980 LOWEST 47.62 Aug. 8, 1980



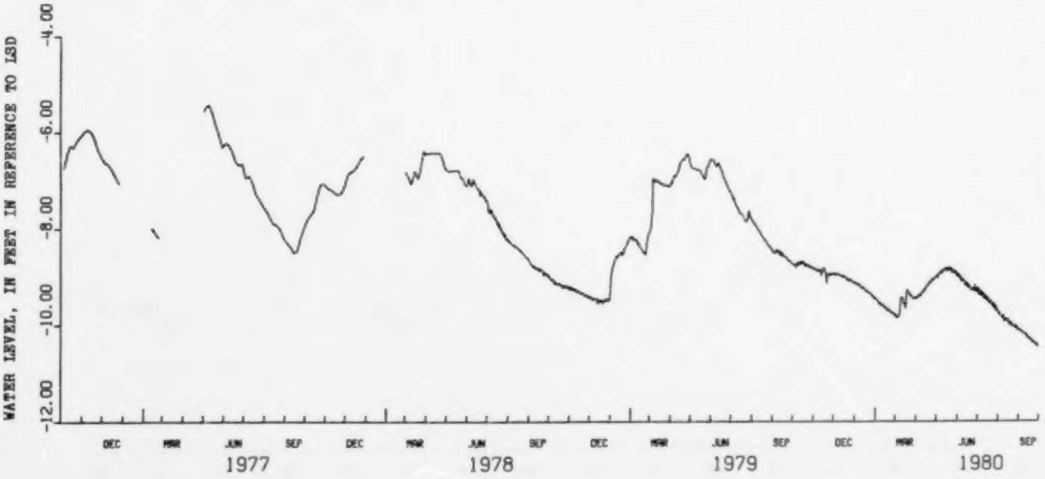
SARATOGA COUNTY

430013073370401. Local number, Sa 1072.
LOCATION.--Lat 43°00'13", long 73°37'04", Hydrologic Unit 02020003, Saratoga National Historical Park near Stillwater. Owner: U.S. National Park Service.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 20 ft (6.1 m), filled in from original depth of 24 ft (7.3 m), cased to 21 ft (6.4 m), 2-in. (0.05-m) well point (30-gauze screen 21 ft or 6.4 m to 24 ft or 7.3 m).
DATUM.--Altitude of land-surface datum is 224 ft (68 m), from topographic map. Measuring point: Top of casing, 3.31 ft (1.007 m) above land-surface datum.
REMARKS.--Water level affected by adjacent well pumping.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for July 1959 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.94 ft (1.20 m) below land-surface datum, May 25, 1976; lowest, 11.91 ft (3.63 m) below land-surface datum, Oct. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.73	8.85	8.93	9.15	9.44	9.78	9.47	9.00	9.00	9.24	9.70	10.12
2	8.74	8.85	8.96	9.12	9.48	9.85	9.44	9.03	8.94	9.30	9.76	10.13
3	8.75	8.86	8.93	9.15	9.47	9.80	9.43	8.97	9.02	9.24	9.78	10.13
4	8.75	8.82	8.98	9.15	9.49	9.86	9.46	9.05	8.96	9.38	9.74	10.10
5	8.78	8.87	8.94	9.18	9.51	9.82	9.40	8.95	9.03	9.28	9.82	10.16
6	8.76	8.88	8.97	9.15	9.54	9.85	9.38	8.98	8.98	9.40	9.83	10.13
7	8.82	8.89	8.94	9.20	9.58	9.80	9.42	8.91	9.10	9.31	9.84	10.18
8	8.73	8.86	8.96	9.16	9.54	9.82	9.36	8.94	9.03	9.39	9.82	10.18
9	8.70	8.90	8.95	9.18	9.58	9.59	9.41	8.93	9.11	9.32	9.88	10.18
10	8.71	8.85	8.99	9.21	9.61	9.44	9.34	8.88	9.05	9.43	9.80	10.21
11	8.77	8.86	8.99	9.25	9.59	9.43	9.32	8.94	9.12	9.34	9.94	10.18
12	8.72	8.86	8.98	9.21	9.61	9.44	9.35	8.87	9.09	9.47	9.89	10.23
13	8.72	8.99	8.97	9.21	9.59	9.46	9.27	8.89	9.12	9.39	9.88	10.20
14	8.68	8.93	9.02	9.27	9.64	9.57	9.27	8.87	9.20	9.48	9.92	10.27
15	8.75	8.84	9.00	9.23	9.62	9.55	9.31	8.84	9.12	9.40	9.92	10.27
16	8.69	8.82	9.03	9.26	9.68	9.56	9.23	8.87	9.21	9.50	9.93	10.30
17	8.68	8.83	8.99	9.28	9.64	9.67	9.20	8.83	9.14	9.48	9.88	10.26
18	8.74	8.83	8.99	9.31	9.65	9.47	9.21	8.91	9.24	9.44	10.01	10.32
19	8.70	8.92	9.03	9.29	9.72	9.27	9.22	8.83	9.18	9.55	9.99	10.29
20	8.78	8.92	9.02	9.33	9.67	9.35	9.15	8.87	9.25	9.50	10.00	10.35
21	8.80	9.16	9.07	9.31	9.72	9.32	9.18	8.81	9.21	9.57	9.94	10.32
22	8.74	9.03	9.04	9.35	9.69	9.36	9.11	8.87	9.30	9.50	10.04	10.38
23	8.79	8.94	9.10	9.33	9.75	9.34	9.15	8.81	9.29	9.60	10.03	10.35
24	8.76	8.94	9.05	9.36	9.72	9.42	9.08	8.91	9.29	9.56	10.04	10.35
25	8.76	8.95	9.10	9.37	9.77	9.39	9.07	8.84	9.25	9.63	10.04	10.39
26	8.79	8.99	9.06	9.36	9.74	9.39	9.11	8.94	---	9.56	10.05	10.41
27	8.81	8.94	9.08	9.37	9.79	9.45	9.04	8.90	9.31	9.67	10.00	10.38
28	8.83	8.95	9.08	9.44	9.76	9.47	9.08	8.92	9.17	9.59	10.08	10.45
29	8.79	8.96	9.13	9.41	9.77	9.46	9.02	8.87	9.24	9.72	10.03	10.40
30	8.79	8.95	9.13	9.42	---	9.48	9.05	8.95	9.33	9.63	10.11	10.47
31	8.83	---	9.11	9.48	---	9.43	---	8.89	---	9.72	10.07	---

WTR YEAR 1980 HIGHEST 8.67 Oct. 14, 15, 17, 18, 1979 LOWEST 10.61 Sept. 30, 1980



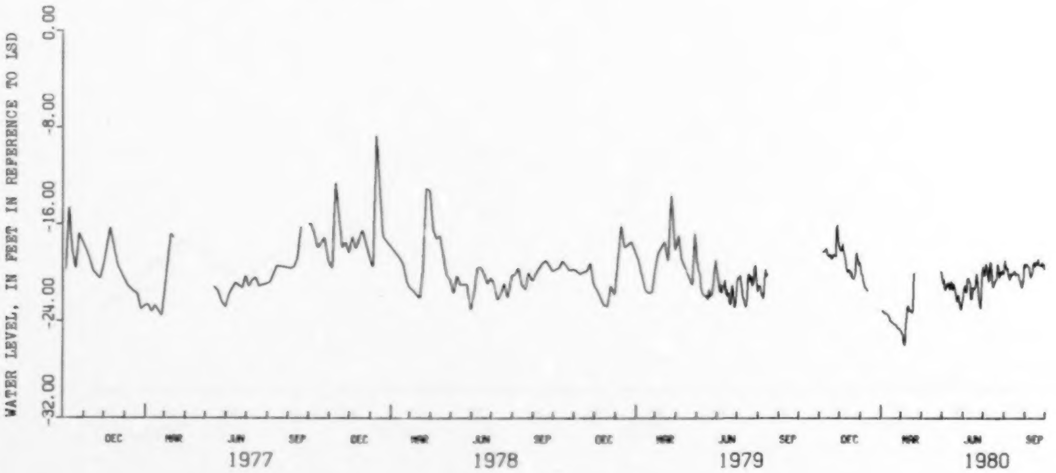
SCHENECTADY COUNTY

424910073591401. Local number, Sn 363.
LOCATION.--Lat 42°49'10", long 73°59'14", Hydrologic Unit 02020004, in Schenectady.
Owner: City of Schenectady.
AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 54 ft (16.4 m), filled in from original depth of 57 ft (17.4 m), cased to 57 ft (17.4 m), open end.
DATUM.--Land-surface datum is 228.50 ft (69.647 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.47 ft (0.753 m) above land-surface datum.
REMARKS.--Water level affected by stage of Mohawk River, and by pumping (average 16.8 Mgal/d or 63,600 m^3/d in 1978) from adjacent municipal well field.
PERIOD OF RECORD.--June 1960 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.62 ft (1.10 m) below land-surface datum, Dec. 27, 1973; lowest, 31.27 ft (9.53 m) below land-surface datum, Feb. 10, 1966.
CORRECTIONS.--Data published last year for May through September were incorrectly referenced. Therefore, 0.21 ft (0.064 m) must be subtracted from each water level published last year for the aforementioned time frame.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	17.86	19.20	---	24.78		19.90	22.36	19.98	20.06	19.36
2		---	17.93	19.64	---	24.92		20.36	21.90	19.54	19.56	19.36
3		---	18.17	20.15	---	25.00		20.88	21.38	19.87	19.00	19.54
4		---	18.25	20.14	---	25.18		20.51	21.27	20.26	19.52	19.24
5		---	18.12	20.41	23.25	25.31		20.74	21.03	20.16	19.55	19.44
6		---	17.60	20.69	23.31	25.80		21.48	21.58	19.28	19.86	19.48
7		---	18.17	20.97	23.36	26.02		21.41	21.62	19.57	19.63	19.54
8		---	18.32	21.26	23.37	24.93		20.99	20.83	19.63	20.14	19.55
9		---	18.50	21.29	23.38	23.86		21.18	20.47	19.77	20.33	20.16
10		18.19	19.00	---	23.40	23.62		20.84	20.44	20.77	20.60	20.41
11		17.99	19.18	---	23.46	22.91		21.15	20.70	20.39	20.04	20.21
12		18.01	19.69	---	23.56	22.70		20.93	20.78	19.26	20.30	20.11
13		18.43	19.88	---	23.70	22.93		21.43	21.31	19.13	20.25	19.78
14		18.55	20.00	---	23.86	23.19		20.80	22.22	19.47	20.04	19.27
15		18.60	19.79	---	24.00	23.13		21.26	22.11	20.52	20.14	19.16
16		18.66	19.76	---	24.05	23.13		20.72	21.23	21.20	19.92	19.53
17		18.47	19.81	---	24.06	23.07		21.43	21.37	21.14	19.85	19.38
18		18.53	20.29	---	24.15	23.34		21.34	21.23	20.72	20.00	19.13
19		18.86	19.93	---	24.22	22.92		20.93	21.41	20.83	20.25	19.30
20		18.88	20.47	---	24.26	21.42		21.13	21.15	20.55	20.07	19.20
21		18.87	20.45	---	24.27	20.05		21.48	20.78	20.61	20.11	18.89
22		18.47	20.48	---	24.29	---		21.60	20.09	20.38	20.13	19.41
23		18.63	20.52	---	24.34	---		22.05	20.54	19.32	20.13	19.34
24		18.54	20.20	---	24.42	---		22.41	20.96	19.33	20.50	19.36
25		18.43	19.94	---	24.52	---		22.14	21.84	19.84	20.65	19.45
26		18.71	18.66	---	24.60	---		21.83	22.23	20.39	20.96	19.36
27		16.40	18.35	---	24.61	---		22.38	22.84	19.92	21.05	19.17
28		16.03	18.93	---	24.66	---		22.53	22.94	20.20	21.28	19.57
29		16.97	18.91	---	24.71	---		22.88	21.48	20.02	20.60	19.26
30		17.69	19.30	---	---	---		23.07	20.13	19.82	20.77	19.71
31		---	19.44	---	---	---		22.53	---	20.11	19.26	---

WTR YEAR 1980 HIGHEST 4.97 May 1, 1980 LOWEST 26.36 Mar. 7, 1980

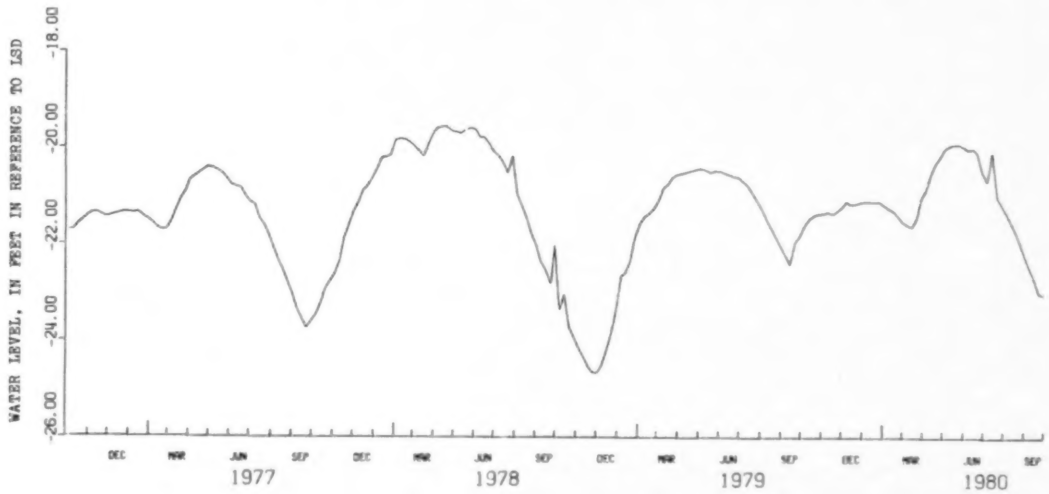


ULSTER COUNTY

414425074213601. Local number, U 204.
LOCATION.--Lat 41°44'25", long 74°21'36", Hydrologic Unit 02020007, near Napanoch.
Owner: New York State Department of Correction.
AQUIFER.--Water-table aquifer in deposits of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in. (0.20 m), depth 46 ft (14.0 m), cased to unknown depth, filled in from original depth of 67 ft (20.4 m).
DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Top of casing, 1.00 ft (0.305 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1954 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.84 ft (5.13 m) below land-surface datum, Mar. 24, 1955; lowest measured, 26.90 ft (8.20 m) below land-surface datum, Dec. 29, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1979	21.82	JAN 08, 1980	21.10	APR 15, 1980	20.54	JUL 08, 1980	20.68
09	21.60	15	21.10	22	20.31	16	20.08
17	21.45	22	21.11	29	20.17	23	21.01
24	21.38	29	21.10	MAY 06	20.00	29	21.14
30	21.36	FEB 05	21.17	13	19.93	AUG 05	21.32
NOV 07	21.35	13	21.25	20	19.91	12	21.51
13	21.32	19	21.29	28	19.91	19	21.72
21	21.36	26	21.40	29	19.92	26	21.96
27	21.30	MAR 04	21.52	JUN 03	19.95	SEP 02	22.22
DEC 04	21.22	11	21.58	10	20.02	09	22.47
11	21.10	18	21.62	18	20.00	16	22.70
18	21.16	25	21.44	24	20.09	23	23.00
26	21.14	APR 01	21.01	JUL 01	20.49	30	23.03
JAN 02, 1980	21.11	08	20.85	02	20.52		



ULSTER COUNTY

414948074035101. Local number, U 405.

LOCATION.--Lat 41°49'48", long 74°03'51", Hydrologic Unit 02020007, Grist Mill Road, Tillson.
Owner: City School District of Kingston.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 36 ft (11.0 m), cased to 34 ft (10.4 m), 2-in. (0.05-m) well point (60-gauze screen 34 ft or 10.4 m to 36 ft or 11.0 m).

DATUM.--Altitude of land-surface datum is 240 ft (73 m), from topographic map. Measuring point: Top of casing, 0.47 ft (0.143 m) above land-surface datum.

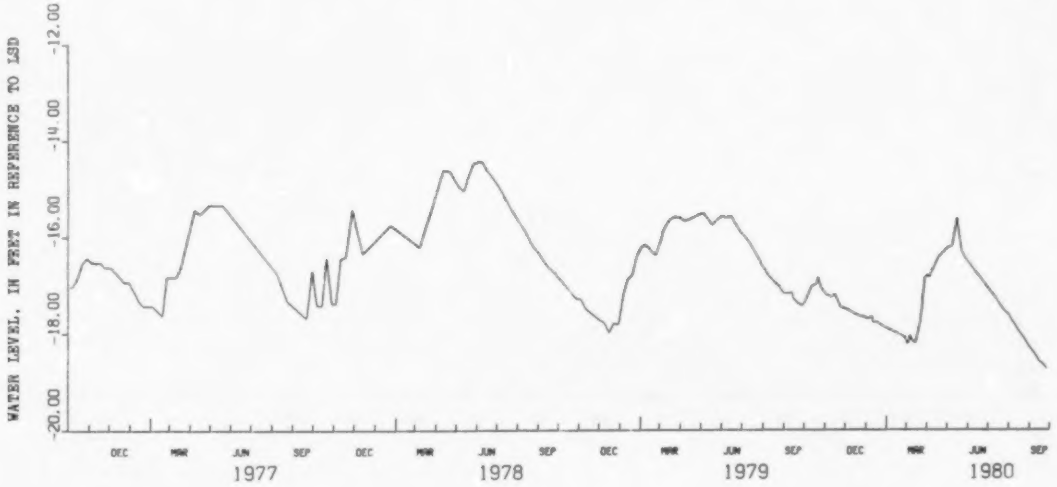
REMARKS.--Originally a dug well, diameter 36 in. (0.91 m), depth 21 ft (6.4 m), stone-lined. Well deepened by power auger, October 1965.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1964 to July 1965, March 1966 to December 1974, April 1976 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.43 ft (4.40 m) below land-surface datum, June 3, 1978; lowest measured, 20.71 ft (6.31 m) below land-surface datum, Jan. 24, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1979	17.24	JAN 12, 1980	17.77	APR 19, 1980	16.43	JUL 26, 1980	17.54
13	17.03	19	17.79	26	16.33	AUG 02	17.63
20	16.98	26	17.85	MAY 03	16.23	07	17.76
22	16.85	FEB 02	17.90	10	16.20	09	17.79
27	17.08	23	18.05	17	15.63	16	17.96
NOV 03	17.20	MAR 01	18.11	24	16.33	23	18.08
10	17.26	03	18.24	31	16.49	30	18.25
17	17.20	07	18.05	JUN 07	16.62	SEP 06	18.38
24	17.46	08	18.13	14	16.75	13	18.52
DEC 01	17.49	15	18.21	21	16.86	15	18.59
15	17.60	22	17.76	27	16.99	20	18.63
22	17.65	29	16.86	28	17.00	27	18.74
29	17.67	APR 04	16.80	JUL 05	17.13		
JAN 05, 1980	17.71	05	16.85	12	17.26		
10	17.66	12	16.65	19	17.40		

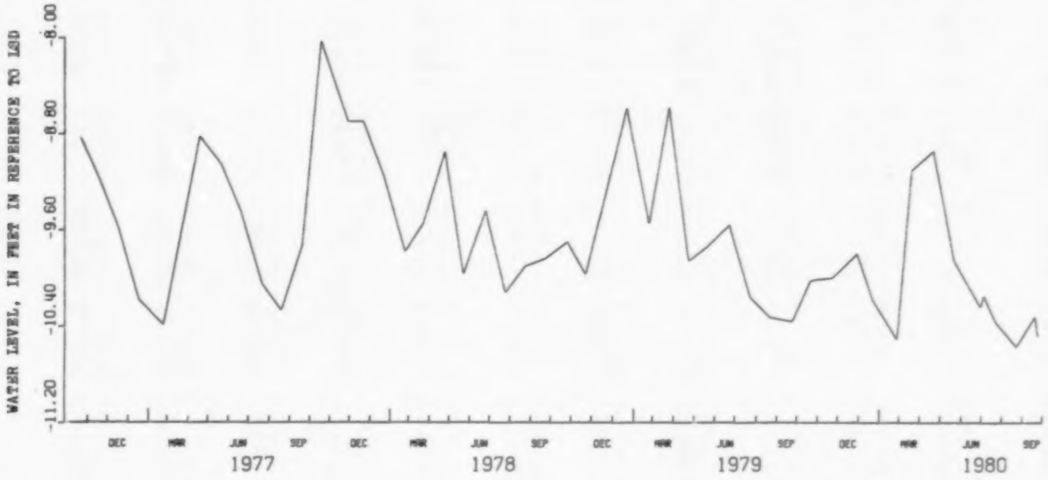


WASHINGTON COUNTY

431026073194101. Local number, W 264.
LOCATION.--Lat 43°10'26", long 73°19'41", Hydrologic Unit 02020003, in Salem.
Owner: Village of Salem.
AQUIFER.--Water-table aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug fire-protection well, approximate size 8 ft (2.4 m) by 12 ft (3.7 m), depth 14 ft (4.3 m), filled in from original depth of 15 ft (4.6 m), stone-lined.
DATUM.--Land-surface datum is 485.5 ft (147.98 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of concrete cover at north side of square opening, at land-surface datum.
REMARKS.--Water level affected by stage of nearby stream.
PERIOD OF RECORD.--July 1946 to December 1973, October 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 6.62 ft (2.02 m) below land-surface datum, Apr. 4, 1960; lowest measured 11.70 ft (3.57 m) below land-surface datum, Oct. 12, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 1979	10.02	JAN 23, 1980	10.18	MAY 24, 1980	9.86	AUG 25, 1980	10.57
NOV 24	10.00	FEB 28	10.51	JUL 02	10.24	SEP 22	10.32
DEC 31	9.80	MAR 22	9.11	07	10.15	26	10.48
JAN 17, 1980	10.08	APR 24	8.95	25	10.37		



WASHINGTON COUNTY

431030073192101. Local number, W 533.

LOCATION.--Lat 43°10'30", long 73°19'21", Hydrologic Unit 02020003, in Salem.
Owner: Salem Central High School.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 15 ft (4.6 m), cased to 16 ft (4.9 m), open end. Well backfilled 1.6 ft (0.48 m) with coarse gravel.

DATUM.--Altitude of land-surface datum is 490 ft (149 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.

REMARKS.--Well was drilled March 1974 as a replacement for 431032073192401 (local number W 532), located 350 ft (107 m) northwest, which has a period of record from October 1965 to June 1973 (unpublished).

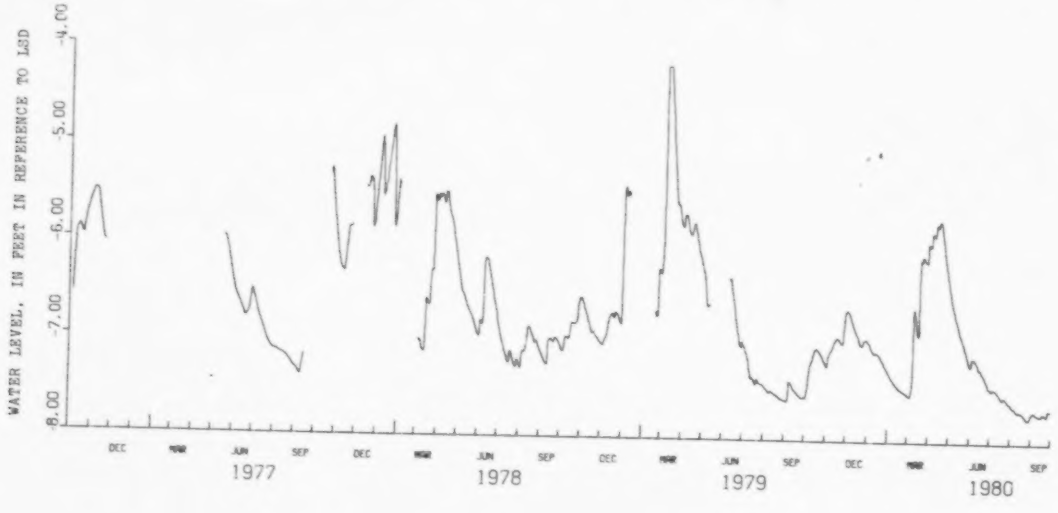
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for March 1974 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.99 ft (1.22 m) below land-surface datum, Jan. 29, 1976; lowest recorded, 7.75 ft (2.36 m) below land-surface datum, Aug. 26, 27-29, 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.56	7.23	6.66	6.97	7.29	7.51	5.96	6.38	7.21	7.44	7.59	7.69
2	7.56	7.24	6.66	6.98	7.30	7.52	5.98	6.43	7.22	7.44	7.60	7.69
3	7.55	7.18	6.66	6.99	7.32	7.52	5.99	6.47	7.21	7.45	7.62	7.68
4	7.48	7.13	6.67	7.00	7.33	7.53	5.97	6.51	7.15	7.46	7.62	7.67
5	7.45	7.11	6.68	7.02	7.34	7.53	5.87	6.55	7.13	7.46	7.63	7.67
6	7.35	7.09	6.70	7.04	7.35	7.50	5.85	6.59	7.13	7.44	7.63	7.67
7	7.27	7.08	6.72	7.06	7.36	7.44	5.86	6.62	7.15	7.44	7.63	7.68
8	7.23	7.07	6.74	7.07	7.37	7.30	5.88	6.64	7.14	7.45	7.64	7.69
9	7.21	7.06	6.77	7.08	7.38	6.73	5.89	6.67	7.15	7.45	7.65	7.69
10	7.19	7.04	6.79	7.09	7.39	6.63	5.84	6.70	7.16	7.45	7.66	7.70
11	7.17	7.02	6.81	7.10	7.40	6.66	5.77	6.73	7.18	7.46	7.67	7.70
12	7.15	7.00	6.83	7.09	7.41	6.71	5.76	6.76	7.19	7.47	7.67	7.70
13	7.12	6.98	6.85	7.08	7.42	6.77	5.76	6.78	7.21	7.48	7.67	7.71
14	7.09	6.97	6.87	7.09	7.42	6.81	5.79	6.80	7.23	7.48	7.68	7.71
15	7.07	6.96	6.89	7.09	7.43	6.87	5.76	6.82	7.25	7.50	7.67	7.71
16	7.06	6.95	6.91	7.10	7.44	6.91	5.72	6.86	7.24	7.51	7.67	7.71
17	7.06	6.94	6.91	7.10	7.45	6.91	5.72	6.88	7.25	7.52	7.68	7.71
18	7.05	6.94	6.93	7.11	7.45	6.38	5.74	6.91	7.27	7.53	7.68	7.68
19	7.06	6.95	6.95	7.12	7.46	6.14	5.79	6.92	7.28	7.54	7.68	7.68
20	7.07	6.95	6.98	7.13	7.46	6.13	5.83	6.94	7.29	7.55	7.69	7.69
21	7.08	6.97	7.00	7.15	7.47	6.15	5.89	6.96	7.30	7.55	7.70	7.69
22	7.09	6.98	7.01	7.16	7.47	6.11	5.94	6.98	7.31	7.53	7.71	7.69
23	7.10	6.99	7.01	7.17	7.48	6.09	5.99	7.00	7.33	7.52	7.71	7.70
24	7.11	7.00	7.02	7.18	7.48	6.11	6.05	7.02	7.34	7.53	7.72	7.71
25	7.12	7.00	7.00	7.20	7.48	6.13	6.10	7.05	7.36	7.54	7.74	7.71
26	7.14	6.98	6.97	7.22	7.49	6.13	6.15	7.07	7.37	7.55	7.74	7.66
27	7.15	6.90	6.96	7.23	7.49	6.14	6.20	7.09	7.39	7.56	7.75	7.65
28	7.17	6.78	6.96	7.24	7.50	6.15	6.25	7.12	7.41	7.57	7.75	7.65
29	7.18	6.71	6.96	7.25	7.50	6.16	6.30	7.15	7.43	7.58	7.75	7.65
30	7.19	6.67	6.95	7.26	---	6.03	6.34	7.17	7.44	7.58	7.74	7.66
31	7.21	---	6.96	7.28	---	5.96	---	7.19	---	7.59	7.71	---

WTR YEAR 1980 HIGHEST 5.71 Apr. 16, 1980 LOWEST 7.75 Aug. 26, 27-29, 30, 1980



WESTCHESTER COUNTY

411421073481201. Local number, We 3.

LOCATION.--Lat 41°14'21", long 73°48'12", Hydrologic Unit 02030101, near Yorktown Heights.
Owner: New York City Board of Water Supply.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth 15.3 ft (4.66 m) in November 1978, original depth reported to be 18.2 ft (5.55 m), filled in to 17.1 ft (5.21 m) as of November 1956, to 16.3 ft (4.97 m) as of June 1971, to 15.5 ft (4.72 m) as of October 1977, stone lined.

DATUM.--Altitude of land-surface datum is 252.5 ft (76.96 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in wooden well cover, 1.13 ft (0.34 m) above land-surface datum.

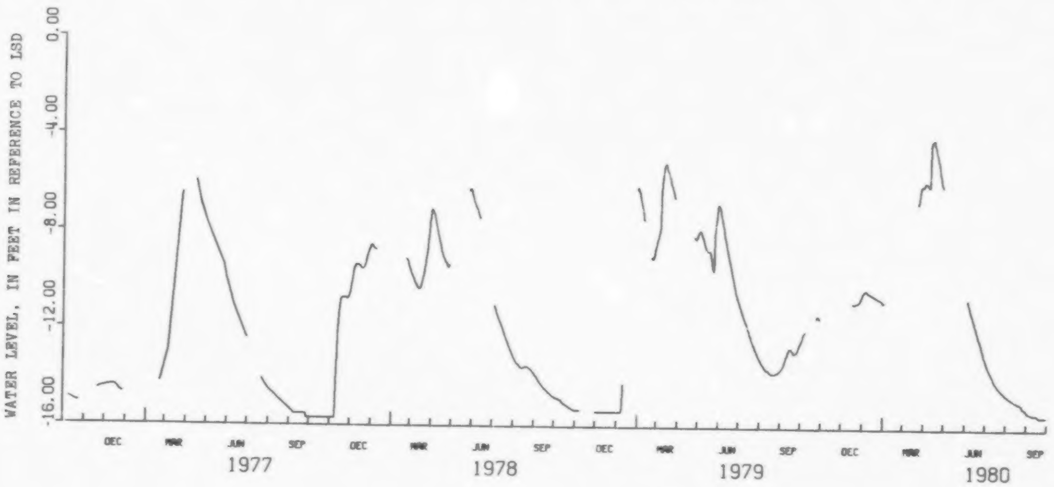
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for April 1934 to September 1937, April 1938 to September 1945, March 1951 to September 1976 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.9 ft (1.19 m) below land-surface datum, Apr. 12, 13, 1958; lowest measured, dry Nov. 30, 1935, Jan. 7, 1936, Feb. 1, 1936, Jan. 6 to Feb. 4, 1965, Nov. 12, 1970, Sept. 10 to Nov. 9, 1977, Oct. 30 to Nov. 7, 1978, Nov. 28, 1978 to Jan. 8, 1979, Sept. 6 to 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.47		---	10.46	10.84	---	6.01		---	13.13	14.56	15.23
2	12.40		---	10.39	---	---	5.86		---	13.21	14.58	15.26
3	12.35		---	10.36	---	---	5.83		---	13.29	14.61	15.28
4	12.28		---	10.34	---	---	5.87		---	13.35	14.63	15.29
5	12.13		---	10.30	---	---	5.85		10.70	13.42	14.65	15.30
6	---		---	10.32	---	---	5.89		10.81	13.48	14.68	DRY
7	---		---	10.31	---	---	5.94		10.91	13.54	14.70	DRY
8	---		---	10.36	---	---	6.00		11.01	13.60	14.71	DRY
9	---		---	10.40	---	---	6.03		11.10	13.65	14.73	DRY
10	---		---	---	---	---	6.01		11.21	13.71	14.75	DRY
11	---		---	---	---	---	4.42		11.30	13.77	14.77	DRY
12	---		---	---	---	---	4.16		11.39	13.83	14.79	DRY
13	---		---	---	---	---	4.14		11.48	13.89	14.81	DRY
14	---		---	---	---	---	4.12		11.56	13.94	14.83	DRY
15	---		---	---	---	---	4.14		11.65	14.05	14.84	DRY
16	---		---	---	---	---	4.06		11.74	14.06	14.84	DRY
17	---		---	---	---	---	4.31		11.84	14.11	14.85	DRY
18	---		10.85	---	---	---	4.38		11.93	14.14	14.86	DRY
19	---		10.86	---	---	---	4.52		12.02	14.18	14.88	DRY
20	---		10.88	---	---	---	4.64		12.12	14.22	14.89	DRY
21	---		10.87	---	---	---	4.78		12.22	14.26	14.90	DRY
22	---		10.85	---	---	---	4.93		12.32	14.30	14.91	DRY
23	---		10.84	---	---	---	5.03		12.37	14.33	14.92	DRY
24	---		10.83	---	---	---	5.27		12.44	14.35	14.94	DRY
25	---		10.81	---	---	6.58	5.44		12.55	14.38	15.00	DRY
26	---		10.81	---	---	6.27	5.62		12.66	14.40	15.09	DRY
27	11.36		10.80	---	---	6.10	5.80		12.76	14.43	15.10	DRY
28	11.43		10.73	---	---	6.01	5.97		12.87	14.46	15.10	DRY
29	11.50		10.67	10.73	---	5.97	5.99		12.97	14.49	15.14	DRY
30	---		10.59	10.76	---	5.98	---		13.06	14.51	15.13	DRY
31	---		10.53	10.81	---	6.02	---		---	14.54	15.19	---

WTR YEAR 1980 HIGHEST 3.98 Apr. 16, 1980 LOWEST DRY Sept. 6-30, 1980



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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons